

Commonwealth of Virginia

VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY

TIDEWATER REGIONAL OFFICE

5636 Southern Boulevard, Virginia Beach, Virginia 23462 (757) 518-2000 FAX (757) 518-2009 www.deq.virginia.gov

Matthew J. Strickler Secretary of Natural Resources David K. Paylor Director (804) 698-4000

Craig R. Nicol Regional Director

May 23, 2019

Mr. Michael G. Dennis Environmental Engineer Huntington Ingalls Incorporated – Newport News Shipbuilding 4101 Washington Avenue Mail Code O27, B79-1 Newport News, Virginia 23607

Location: Newport News **Registration No.: 60153**

Dear Mr. Dennis:

Attached is a significant modification to your permit to operate your facility pursuant to 9VAC5 Chapter 80 Article 1 of the Virginia Regulations for the Control and Abatement of Air Pollution. This permit modification reflects the addition and removal of emission units, changes in fuel type, changes in pollution control equipment, and changes to applicable requirements. The attached permit will be in effect beginning May 23, 2019.

In the course of evaluating the application and arriving at a final decision to issue this permit, the Department of Environmental Quality (DEQ) deemed the revised application complete on May 21, 2018 and solicited written public comments by placing a newspaper advertisement in *The Daily Press* on February 23, 2019. The thirty-day required comment period, provided for in 9VAC5-80-270, expired on March 25, 2019.

This permit contains legally enforceable conditions. Failure to comply may result in a Notice of Violation and/or civil charges. <u>Please read all permit conditions carefully.</u>

This permit approval to operate shall not relieve Huntington Ingalls Incorporated – Newport News Shipbuilding of the responsibility to comply with all other local, state, and federal permit regulations.

The Board's Regulations as contained in Title 9 of the Virginia Administrative Code 5-170-200 provide that you may request a formal hearing from this case decision by filing a petition with the Board within 30 days after this case decision notice was mailed or delivered to you. Please consult the relevant regulations for additional requirements for such requests.

As provided by Rule 2A:2 of the Supreme Court of Virginia, you have 30 days from the date you actually received this permit or the date on which it was mailed to you, whichever occurred first, within which to initiate an appeal of this decision by filing a Notice of Appeal with:

David K. Paylor, Director Department of Environmental Quality PO Box 1105 Richmond, VA 23218

If this permit was delivered to you by mail, three days are added to the thirty-day period in which to file an appeal. Please refer to Part Two A of the Rules of the Supreme Court of Virginia for information on the required content of the Notice of Appeal and for additional requirements governing appeals from decisions of administrative agencies.

If you have any questions concerning this permit, please contact Amber Foster at 804-698-4086.

Sincerely,

Laura D. Corl Air Permit Manager

LDC/AKF/60153_083_19_FOP_T5SigMod_HII-NNShipbldg_cvrltr.docx

Attachments: Title V Permit

Statement of Basis

cc: Director, OAPP (electronic file submission)

Manager, Data Analysis OAPP (electronic file submission)

Manager / Inspector, Air Compliance (electronic file submission)

Chief, Air Enforcement Branch (3AP13), U.S. EPA, Region III (electronic file submission)



Commonwealth of Virginia

VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY

TIDEWATER REGIONAL OFFICE

5636 Southern Boulevard, Virginia Beach, Virginia 23462 (757) 518-2000 FAX (757) 518-2009 www.deg.virginia.gov

Matthew J. Strickler Secretary of Natural Resources David K. Paylor Director (804) 698-4000

Craig R. Nicol Regional Director

Federal Operating Permit Article 1

This permit is based upon the requirements of Title V of the Federal Clean Air Act and Chapter 80, Article 1, of the Commonwealth of Virginia Regulations for the Control and Abatement of Air Pollution. Until such time as this permit is reopened and revised, modified, revoked, terminated or expires, the permittee is authorized to operate in accordance with the terms and conditions contained herein. This permit is issued under the authority of Title 10.1, Chapter 13, §10.1-1322 of the Air Pollution Control Law of Virginia. This permit is issued consistent with the Administrative Process Act, and 9VAC5-80-50 through 9VAC5-80-300 of the State Air Pollution Control Board Regulations for the Control and Abatement of Air Pollution of the Commonwealth of Virginia.

Authorization to operate a Stationary Source of Air Pollution as described in this permit is hereby granted to:

Permittee Name:

Huntington Ingalls Incorporated - Newport News Shipbuilding

Facility Name:

 $Hunting ton\ In galls\ Incorporated-Newport\ News\ Shipbuilding$

Facility Location:

4101 Washington Avenue Newport News, Virginia 23607

Newport

Registration Number:

60153

Permit Number:

TRO-60153

This permit includes the following programs:

Federally Enforceable Requirements - Clean Air Act (Pages 24 through 102) State Only Enforceable Requirements (Page 103)

April 29, 2015

Effective Date

April 28, 2020

Expiration Date

May 23, 2019

Amended Date

May 23, 2019

Signature Date

Craig R. Nicol

Table of Contents, pages 2-3 Equipment List, pages 5-22

Permit Conditions, pages 23-103

Table of Contents

I. Facility Information	4
II. Emission Units	5
III. Boiler Requirements - Small Boilers and Process Heaters	23
Limitations	23
Testing and Monitoring	
Notifications, Recordkeeping, and Reporting	
IV. Boiler Requirements - Barge-Mounted Boilers and Steam Plant Boilers	26
Limitations	26
Testing and Monitoring	
Notifications, Reporting, and Recordkeeping	
V. Engine/Generator Requirements	
Limitations	
Monitoring	
Recordkeeping	
Testing	
VI. Foundry Operations Requirements	43
Limitations	
Monitoring	
Recordkeeping	
Testing	
Notifications and Reporting	
VII. Steel Preparation and Fabrication Requirements	55
Limitations	55
Monitoring	
Recordkeeping	57
VIII. Secondary Lead Processing Requirements	59
Limitations	59
Monitoring	
Recordkeeping	60
Testing	60
IX. Woodworking Requirements	61
Limitations	61
Monitoring	
Recordkeeping	63
Testing	63
X. Flame Spray Facility Requirements	64
Limitations	64
Recordkeeping	64

XI.	Satellite Blast and Coat Facility Requirements	65
Limi	itations	65
Mon	itoring	66
Reco	ordkeeping	67
XII.	Blast and Coat Facility West Requirements	69
Limi	itations	69
Mon	itoring	70
Reco	ordkeeping	72
XIII.	Shipyard MACT Requirements	74
Limi	itations	74
Mon	itoring and Recordkeeping	74
Testi	ing	76
Repo	orting	76
XIV.	Specialty Shops Requirements	77
Limi	itations	77
Mon	itoring	79
	ordkeeping	
Testi	ing	81
XV.	Miscellaneous Activities Requirements	82
Limi	itations	82
Mon	itoring	83
Reco	ordkeeping	84
Testi	ing	
XVI.	Insignificant Emission Units	85
XVII.	Permit Shield & Inapplicable Requirements	92
XVIII.	General Conditions	95
XIX.	State-Only Enforceable Requirements	103

Permit Number: TRO-60153

May 23, 2019 Page 4 of 103

I. Facility Information

Permittee

Huntington Ingalls Incorporated – Newport News Shipbuilding 4101 Washington Avenue Mail Code O27, B79-1 Newport News, Virginia 23607

Facility

Huntington Ingalls Incorporated - Newport News Shipbuilding 4101 Washington Avenue Newport News, Virginia 23607

Responsible Official

Mr. James A. Erickson Manager, Environmental Engineering (757) 688-9247 James A. Erickson@hii-nns.com

Contact Person

Mr. Michael G. Dennis Environmental Engineer (757) 534-3836 michael.g.dennis@hii-nns.com

County-Plant Identification Number: 51-700-00013

Facility Description: NAICS 336611- This U.S. industry comprises establishments primarily engaged in operating shipyards. Shipyards are fixed facilities with dry docks and fabrication equipment capable of building a ship, defined as watercraft typically suitable or intended for other than personal or recreational use. Activities of shipyards include the construction of ships, their repair, conversion and alteration, the production of prefabricated ship and barge sections, and specialized services, such as ship scaling.

Huntington Ingalls Incorporated - Newport News Shipbuilding, (formerly Northrop Grumman Shipbuilding, Inc.) owns and operates a major ship construction and overhaul facility in Newport News, Virginia. The facility is classified as a major source for criteria and hazardous air pollutant emissions from its various operations making it subject to the federal Title V operating permitting requirements. Products manufactured or repaired include U.S. Navy contracted aircraft carriers and submarines, as well as ships for commercial applications such as oil tankers and service ships. Services performed at the facility include all activities related to the repair, overhaul, and conversion of ships.

May 23, 2019 Page 5 of 103

II. Emission Units

Equipment to be operated consists of:

Fuel Burning Equipment / Steam Boilers

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
FTSF-E1	FTSF-S1	Natural Gas-fired, barge- mounted boiler, Combustion Engineering Model V2M-8, pre-1983	224 MMBTU/hr	Low-NOx burners	-	NO_X	2/7/18 NSR Permit
FTSF-E2	FTSF-S2	Natural Gas-fired, barge- mounted boiler, Combustion Engineering Model V2M-8, pre-1983	224 MMBTU/hr	Low-NOx burners	1	NO_X	2/7/18 NSR Permit
78-E4	78-S4	Natural gas-fired, Powerhouse Boiler #1	99.4 MMBTU/hr	Low-NOx burners with flue-gas recirculation	S4	NO_X	2/7/18 NSR Permit
78-E5	78-S5	Natural gas-fired, Powerhouse Boiler #2	145 MMBTU/hr	Low-NOx burners with flue-gas recirculation	S5	NO_X	2/7/18 NSR Permit
78-E6	78-S6	Natural gas-fired, Powerhouse Boiler #3	145 MMBTU/hr	Low-NOx burners with flue-gas recirculation	S 6	NO_X	2/7/18 NSR Permit

Process Heaters (subject to 40 CFR 63, Subpart DDDDD)

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
LPV-NY1	LPV-NY1S	North Yard Liquid Propane Vaporizer	0.54 MMBtu/hr	-	-	-	-
LPV-SY1	LPV-SY1S	South Yard Liquid Propane Vaporizer	0.54 MMBtu/hr	-	-	-	-
205-C1a	205-C1aS	Parts Washer with one natural gas-fired burner, Eclipse Imersojet IJ6	2.0 MMBTU/hr	-	-	-	12/17/15 NSR Permit

May 23, 2019 Page 6 of 103

205-C1b 205-C1b	Parts Washer with one natural gas-fired burner, Eclipse Imersojet IJ6	1.3 MMBTU/hr	-	_	_	12/17/15 NSR Permit
-----------------	--	--------------	---	---	---	------------------------

Small Boilers and Hot Water Heaters (subject to 40 CFR 63, Subpart DDDDD)

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
521-E1	521-S1	Natural gas-fired hot water boiler (24 gal tank)	2 MMBtu/hr	-	ı	_	_
521-E2	521-S2	Natural gas-fired hot water boiler (24 gal tank)	2 MMBtu/hr	_	ı	-	-
521-E3	521-S3	Natural gas-fired hot water boiler (24 gal tank)	2 MMBtu/hr	_	ı	-	-
521-E4	521-S4	Natural gas-fired hot water boiler (24 gal tank)	2 MMBtu/hr	-	ı	-	-
521-E5	521-S5	Natural gas-fired hot water boiler (24 gal tank)	2 MMBtu/hr	-	ı	-	-
1744-E4	1744-S4	North Yard Steam Boiler #1 (natural gas)	2.343 MMBtu/hr	-	ı	-	-
1744-E5	1744-S5	North Yard Steam Boiler #2 (natural gas)	2.343 MMBtu/hr	_	ı	-	-
1877-E1	1877-S1	Natural gas-fired hot water boiler (unknown tank size)	3 MMBtu/hr	_	ı	-	-
1796-E1	1796-S1	Natural gas-fired hot water boiler (24 gal tank)	2 MMBtu/hr	_	-	_	-
4768-E1	4768-S1	Natural gas-fired hot water boiler (31 gal tank)	2 MMBtu/hr	-	-	-	-

Page 7 of 103

4768-E2	4768-S2	Natural gas-fired hot water boiler (31 gal tank)	2 MMBtu/hr	_	_	_	-
4768-E3	4768-S3	Natural gas-fired hot water boiler (31 gal tank)	2 MMBtu/hr	_	_	_	-
4931-WH1	4931- WH1S	Natural gas-fired hot water heater (125 gal tank)	0.5 MMBtu/hr	_	_	_	-
4931-WH2	4931- WH2S	Natural gas-fired hot water heater (125 gal tank)	0.5 MMBtu/hr	-	_	-	-
4931-WH3	4931- WH3S	Natural-gas fired hot water heater (125 gal tank)	0.5 MMBtu/hr	-	_	-	-

Fuel Burning Equipment - Steel Preparation and Fabrication

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
276-E1	276-S1	Propane-fired oven, construction date unknown	15.3 MMBTU/hr	-	ı	_	-
276-E2	276-S2	Propane-fired Ray Campbell Furnace, construction date unknown	15.4 MMBTU/hr	_	I	-	_

Fuel Burning Equipment – Foundry

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
550-E8	550-S8	Propane-fired heat treating furnace # 5784	15.3 MMBTU/hr	-	-	-	_
550-E9	550-S9	Propane-fired heat treating furnace # 5302	27 MMBTU/hr	_	_	-	_

May 23, 2019 Page 8 of 103

550-E13	550-S13	Propane-fired heat treating furnace #57531	12 MMBTU/hr	-	-	_	_	
---------	---------	--	-------------	---	---	---	---	--

Engines/Generators

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
GSE-M290		Caterpillar 3516C Emergency generator, portable rental, ultra-low sulfur diesel (ULSD) Mfr Date: 2008; Install Date 8/4/2018	2000 kW 3516 hp	Direct diesel injection (DI), turbocharged engine (TC), charge air cooler and electronic control module (ECM)	-	NO _X	8/7/2018 NSR Permit
GSE- 10002508		Emergency generator, stationary, ultra- low sulfur diesel (ULSD) Mfr Date: 1988; Install Date 8/1/1988	730 kW 1217 hp	-	-	-	-
GSE- 10040217		Emergency generator, stationary, ultra- low sulfur diesel (ULSD) Mfr Date: 2014; Install Date 2/26/2014	30 kW 49 hp	-	-	-	-
GSE- 10040218		Emergency generator, stationary, ultra- low sulfur diesel (ULSD) Mfr Date: 2014; Install Date 2/26/2014	50 kW 86 hp	-	-	-	-
GSE- 10040219		Emergency generator, stationary, ultra- low sulfur diesel (ULSD) Mfr Date: 2014; Install Date 2/26/2014	30 kW 49 hp	-	-	-	-
GSE- 10040220		Emergency generator, stationary, ultra- low sulfur diesel (ULSD) Mfr Date: 2014; Install Date 2/26/2014	130 kW 198 hp	-	-	-	-
GSE- 10048336		Emergency generator, stationary, ultra- low sulfur diesel (ULSD) Mfr Date: 2015; Install Date 12/31/2015	175 kW 279 hp	-	-	-	-
GSE- 10048337		Emergency generator, stationary, ultra- low sulfur diesel (ULSD) Mfr Date: 2015; Install Date 12/31/2015	350 kW 530 hp	-	-	-	-

	1	1	Ī		1	1	, , , , , , , , , , , , , , , , , , , ,
GSE- 10050838		Emergency generator, stationary, ultra- low sulfur diesel (ULSD) Mfr Date: 2015; Install Date 12/31/2015	500 kW 835 hp	_	_	-	-
GSE- 10056461		Emergency generator, stationary, ultra- low sulfur diesel (ULSD) Mfr Date: 2017; Install Date 3/31/2017	250 kW 389 hp	-	_	_	-
GSE- 10059089		Emergency generator, stationary, Natural Gas Mfr Date: 2017; Install Date 10/2/2017	500 kW 777 hp	-	-	_	-
GSE- 10006537	_	Emergency generator, stationary, ultra- low sulfur diesel (ULSD) Mfr Date: 1976; Install Date: 12/1/76	565 kW 805 hp	_	-	-	-
GSE- 10002521	_	Emergency generator, stationary, ultra- low sulfur diesel (ULSD) Mfr Date: 1980; Install Date: 11/1/80	155 kW 258.3 hp	-	_	-	-
GSE- 10002509	_	Emergency generator, stationary, ultra- low sulfur diesel (ULSD) Mfr Date: 1980; Install Date: 11/1/80	155 kW 258.3 hp	-	_	-	-
GSE- 10002704	_	Emergency generator, stationary, ultra- low sulfur diesel (ULSD) Mfr Date: 1981; Install Date: 8/1/81	250 kW 470 hp	-	_	-	-
GSE- 10003018	_	Emergency generator, stationary, ultra- low sulfur diesel (ULSD) Mfr Date: 1982; Install Date: 9/1/82	1100 kW 1833.3 hp	_	_	-	-
GSE- 10003735	_	Emergency generator, stationary, ultra- low sulfur diesel (ULSD) Mfr Date: 1984; Install Date: 12/1/84	500 kW 833.3 hp	-	-	_	_
GSE- 10003942	_	Emergency generator, stationary, ultra- low sulfur diesel (ULSD) Mfr Date: 1984; Install Date: 6/1/85	50 kW 82 hp	_	_	_	-
GSE- 10003998	_	Emergency generator, stationary, ultra- low sulfur diesel (ULSD) Mfr Date: 1985; Install Date: 12/1/85	30 kW 50.1 hp	-	_	_	-
GSE- 10006964	_	Emergency generator, stationary, ultra- low sulfur diesel (ULSD) Mfr Date: 1985; Install Date: 12/1/85	30 kW 50.1 hp	_	_	_	_

May 23, 2019
Page 10 of 103

GSE- 10004013	_	Emergency generator, stationary, ultra- low sulfur diesel (ULSD) Mfr Date: 1985; Install Date: 12/1/85	50 kW 83.3 hp	_	_	-	-
GSE- 10004043	_	Emergency generator, stationary, ultra- low sulfur diesel (ULSD) Mfr Date: 1985; Install Date: 12/1/85	250 kW 425 hp	-	_	ŀ	-
GSE- 10004745	_	Emergency generator, stationary, ultra- low sulfur diesel (ULSD) Mfr Date: 1987; Install Date: 12/1/87	35 kW 58.3 hp	_	_	ŀ	-
GSE- 10004528	_	Emergency generator, stationary, ultra- low sulfur diesel (ULSD) Mfr Date: 1987; Install Date: 12/1/87	1100 kW 1833.3 hp	-	_	-	-
GSE- 10004569	_	Emergency generator, stationary, ultra- low sulfur diesel (ULSD) Mfr Date: 1987; Install Date: 12/1/87	1100 kW 1833.3 hp	-	_	-	-
GSE- 7000001092	_	Emergency generator, stationary, ultra- low sulfur diesel (ULSD) Mfr Date: 1989; Install Date: 1/1/90	1050 kW 1620 hp	-	_	-	-
GSE- 10005070	_	Emergency generator, stationary, ultra- low sulfur diesel (ULSD) Mfr Date: 1991; Install Date: 3/1/92	140 kW 268 hp	-	_	-	-
GSE- 10005144	_	Emergency generator, stationary, ultra- low sulfur diesel (ULSD) Mfr Date: 1991; Install Date: 5/1/92	350 kW 535 hp	_	-	Т	-
GSE- 10008532	_	Emergency generator, stationary, ultra- low sulfur diesel (ULSD) Mfr Date: 1997; Install Date: 1/23/98	60 kW 100 hp	-	-	ŀ	-
GSE- 10008534	_	Emergency generator, stationary, ultra- low sulfur diesel (ULSD) Mfr Date: 1997; Install Date: 1/23/98	60 kW 100 hp	_	_	-	-
GSE- 10008530	_	Emergency generator, stationary, ultra- low sulfur diesel (ULSD) Mfr Date: 1997; Install Date: 1/23/98	60 kW 100 hp	_	_	-	_

				T			,
GSE- 10008531	-	Emergency generator, stationary, ultra- low sulfur diesel (ULSD) Mfr Date: 1997; Install Date: 1/23/98	60 kW 100 hp	-	_	-	-
GSE- 10008536	-	Emergency generator, stationary, ultra- low sulfur diesel (ULSD) Mfr Date: 1997; Install Date: 1/23/98	60 kW 100 hp	_	_	-	-
GSE- 10008537	_	Emergency generator, stationary, ultra- low sulfur diesel (ULSD) Mfr Date: 1997; Install Date: 1/23/98	60 kW 100 hp	-	_	-	-
GSE- 10008478	-	Emergency generator, stationary, ultra- low sulfur diesel (ULSD) Mfr Date: 1999; Install Date: 1/1/99	400 kW 449 hp	_	_	-	-
GSE- 10015352	-	Emergency generator, stationary, ultra- low sulfur diesel (ULSD) Mfr Date: 2004; Install Date: 8/30/04	355 kW 591.7 hp	_	_	-	-
GSE- 10015903	-	Emergency generator, stationary, ultra- low sulfur diesel (ULSD) Mfr Date: 2004; Install Date: 1/15/05	350 kW 583.3 hp	-	-	-	-
GSE- 10018416	-	Emergency generator, stationary, ultra- low sulfur diesel (ULSD) Mfr Date: 2006; Install Date: 1/1/07	355 kW 589 hp	-	_	-	-
GSE- 10017399	_	Emergency generator, stationary, ultra- low sulfur diesel (ULSD) Mfr Date: 2006; Install Date: 1/11/07	60 kW 100.1 hp	_	_	-	-
GSE- 10018465	_	Emergency generator, stationary, ultra- low sulfur diesel (ULSD) Mfr Date: 2005; Install Date: 2/18/07	60 kW 100 hp	-	_	-	-
PSF-10017424	_	Emergency fire pump, stationary, diesel Mfr Date: 2006; Install Date: 2/18/07	336 kW 450 hp	_	_	_	_
GSE- 10018464	_	Emergency generator, stationary, ultra- low sulfur diesel (ULSD) Mfr Date: 2005; Install Date: 2/18/07	500 kW 764 hp	-	_		_
GSE- 10018413	_	Emergency generator, stationary, ultra- low sulfur diesel (ULSD) Mfr Date: 2006; Install Date: 6/22/07	60 kW 100.1 hp	_	_	_	_

GSE- 10018412	-	Emergency generator, stationary, ultra- low sulfur diesel (ULSD) Mfr Date: 2006; Install Date: 6/22/07	60 kW 100.1 hp	-	_	_	-
PSE-10018737	I	Emergency pump (not fire), stationary, diesel Mfr Date: 2007; Install Date: 1/25/08	403 kW 540 hp	-	_	_	-
PSE-10018735	ı	Emergency pump (not fire), stationary, diesel Mfr Date: 2007; Install Date: 1/25/08	403 kW 540 hp	_	_	_	_
GSE- 10022299	-	Emergency generator, stationary, ultra- low sulfur diesel (ULSD) Mfr Date: 2009; Install Date: 12/4/09	80 kW 130 hp	_	_	-	-
PSF-10022335	-	Emergency fire pump, stationary, ultra- low sulfur diesel (ULSD) Mfr Date: 2009; Install Date: 1/31/10	160 hp	_	_	-	-
GSE- 10025550	-	Emergency generator, stationary, ultra- low sulfur diesel (ULSD) Mfr Date: 2011; Install Date: 10/15/11	2000 kW 2937 hp	-	-	-	11/21/11 NSR Permit
GSE- 10025551	-	Emergency generator, stationary, ultra- low sulfur diesel (ULSD) Mfr Date: 2011; Install Date: 10/15/11	2000 kW 2937 hp	-	-	-	11/21/11 NSR Permit
GSE- 10028237	-	Emergency generator, stationary, ultra- low sulfur diesel (ULSD) Mfr Date: 2012; Install Date: 10/9/12	300 kW 402 hp	-	_	-	-
PSF-10028208	-	Emergency fire pump, stationary, diesel Mfr Date: 2012; Install Date: 3/1/13	175 hp	-	_	_	_

Foundry Operations

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
550-E1	550-S1	Argon/Oxygen Degassing Furnace, Whiting Corporation	25 tons/hr	Two (2) Cartridge Filter system, Donaldson Torit- Downflo Oval 4-128, 99.9% design control efficiency	550-C1a 550-C1b	PM	10/17/14 NSR Permit

550-E3	550-S1	Electric Arc Furnace B	3 tons/hr	Two (2) Cartridge Filter system, Donaldson Torit- Downflo Oval 4-128, 99.9% design control efficiency	550-C1a 550-C1b	РМ	3/17/11 NSR Permit
550-E4	550-S1	Electric Arc Furnace C	6 tons/hr	Two (2) Cartridge Filter system, Donaldson Torit- Downflo Oval 4-128, 99.9% design control efficiency	550-C1a 550-C1b	PM	3/17/11 NSR Permit
FDFS-E1	550-S1	Foundry Dry Feed System	2.2 lbs/hr	Two (2) Cartridge Filter system, Donaldson Torit- Downflo Oval 4-128, 99.9% design control efficiency	550-C1a 550-C1b	PM	3/2/12 Exemption Letter
550-E12	550-S1	Riser Burn Booth, hand torches	0.068 tons/hr	Two (2) Cartridge Filter system, Donaldson Torit- Downflo Oval 4-128, 99.9% design control efficiency	550-C1a 550-C1b	PM	-
550-EF1		Charging/Tapping Operations	12.5 tons/hr	_	_	-	_
550-EF2	-	Pouring casting/Casting cooling Operation	25 tons/hr	_	-	-	-
550-EF3		Mold Making	N/A	_	_	_	_
550-EF5	_	Foundry Shakeout Operations	17 tons/hr	-	-	-	-
550-EF5-SD	555-S11	Foundry Shakeout Operations Side- draft Ventilation System	17 tons/hr	Baghouse, Standard Havens Alpha Mark III, size 24 SH, #34561, 99% design control efficiency	555-C11	PM PM ₁₀ PM _{2.5}	8/1/2017

May 23, 2019

	_	,	-	-
Page	14	of	10)3

550-E20	550-S20	Steel Shot Abrasive Blasting, #5610	6 tons/hr	Cartridge Filter System, Donaldson Torit - Downflo Oval 4-48, 99.9% design control efficiency	550-C20	PM	-
550-E21	550-S21	Sawing operation, #5616	0.01 tons/hr	Cyclone, 70% design control efficiency	550-C21	PM	-
555-E11	555-S11	Sand Reclaim Operations, hopper	12.5 tons/hr	Baghouse, Standard Havens Alpha Mark III, size 24 SH, #34561, 99% design control efficiency	555-C11	PM	-
555-EF3	_	Riser Burn Area, #34561, hand torches	0.068 ton/hr	_	_	_	_
528-EF2	-	Riser Burn Area	N/A	_	-	-	-
556-EF1	_	Electric Induction Furnaces (4 each)	0.5 to 4 tons	_	_	-	_
556-EF3	_	Pouring casting/Casting cooling Operation	4 ton/hr	_	_	-	-

Steel Preparation and Fabrication Operations

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
274-E1	274-S1	Abrasive Shot Blasting	2.5 tons/hr	Wheelabrator #19, Model 126D, 95% design control efficiency	274-C1	PM	-
275-E5	275-S5	Abrasive Shot Blasting	2.5 tons/hr	Pangborn C70, Type CM, 95% design control efficiency	275-C5	PM	-
276-E3PC	Building vents	Plasma Cutting	-	-	_	_	_

May 23, 2019 Page 15 of 103

276-E6	276-S6	Messer Plasma Cutting System	-	Farr Gold Series GS32 pulse jet cartridge filter, 99.9% design control efficiency	276-C6	PM	3/22/2016 NSR
288-E1	288-S1 288-S2 288-S3 288-S4	Abrasive Blasting- Steel shots	2.5 tons/hr	Four (4) Donaldson Torit DFO 4-48 cartridge filters, 95% design control efficiency	288-C1 288-C2 288-C3 288-C4	PM	-
288-E2	288-S5	Abrasive Blasting- Steel shots	2.5 tons/hr	RF Cox Associates baghouse, 95% design control efficiency	288-C5	PM	-
288-E3	288-S6	Abrasive Blasting- Steel shots	2.5 tons/hr	RF Cox Associates baghouse, 95% design control efficiency	288-C6	PM	-

Secondary Lead Processing

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
4582-E12	4582-S2	One (1) Lead Casting Furnace and Lead Repair Operation, located in building 5471	4.7 tons/hr	Baghouse, Standard Havens Alpha Mark III 18, 99.0% design control efficiency	4582-C2	PM Pb	3/17/11 NSR Permit
4582-E12	250-C1S 250-C2S	Additional operating location of Unit #4582-E12 at Bldg 250	4.7 tons/hr	Two (2) IPEC Advance Baghouses, 99.9% nominal control efficiency	250-C2	PM Pb	3/17/11 NSR Permit
LS-E1	4582-S2	Lead School (for training) with 3 work stations, located in building 4698	0.05 tons/hr	Baghouse, Standard Havens Alpha Mark III 18, 99.0% design control efficiency	4582-C2	PM Pb	3/17/11 NSR Permit

May 23, 2019

Page 16 of 103

Wood Working

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
3-E1	3-S1	Cutting/Planer/Re-saw	_	Cyclone, 90.0% design control efficiency	3-C1	PM	-
501-E2	501-S2	Foundry Pattern Shop - wood cutting machines	_	Donaldson-Torit RF Baghouse, 99.9% design control efficiency	501-C2	PM	_
513-E1	513-S1	Warehouse No. 6 Saws	_	Cyclone, 90.0% design control efficiency	513-C1	PM	-

Painting Operations

Painting Operations/Group P-X33

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
232-E1 through E6	232-S1 through S6	Consolidated Paint Facility, 2 banks of 3 paint booths each (6 total)	_	Binks Dynaprecipitator, water wash curtain, 98% design control efficiency	232-C1 through C6	PM-10	-
4681-E3	4681-S3	Metal Finishing Bldg, paint booth, manual	_	Greenline Corporation, water wash curtain, 98% design control efficiency	4681-C2	PM-10	-
4681-E4	4681-S4	Metal Finishing Bldg, paint booth (Zn phosphate coating line), automated	_	Greenline Corporation, water wash curtain, 98% design control efficiency	4681-C3	PM-10	-
4701-E10	4701-S10	Aluminum Wire Flame Spray booth, manual	_	Global Finishing Solutions water wash curtains, 98% design control efficiency	4701-C10	PM-10	2/12/86 NSR Permit

May 23, 2019 Page 17 of 103

4701-E11	4701-S11	Aluminum Wire Flame Spray booth, manual	-	Global Finishing Solutions water wash curtains, 98% design control efficiency	4701-C11	PM-10	2/12/86 NSR Permit
4701-E12	4701-S12	Flame Spray Facility paint booth, north unit, manual	-	Global Finishing Solutions water wash curtains, 98% design control efficiency	4701-C12	PM-10	2/12/86 NSR Permit
4701-E13	4701-S13	Flame Spray Facility paint booth, south unit, manual	-	Global Finishing Solutions water wash curtains, 98% design control efficiency	4701-C13	PM-10	2/12/86 NSR Permit
4702-E1	4702-S1	Paint Spray Bldg, antenna paint booth	-	Filter (paper), JBI Automatic Spray Booth, 90% design control efficiency	4702-C1	PM-10	-
4730-NP	4730- NPFE	Grit Blast & Paint Facility, North Paint Room	_	Filter (paper), 90% design control efficiency	4730- NPC	PM-10	-
4730-SP	4730-SPFE	Grit Blast & Paint Facility, South Paint Room	-	Filter (paper), 90% design control efficiency	4730- SPC	PM-10	-
60-E5	_	Engraving	_	_	_	-	_

Painting Operations/P-SHIPSPRAY

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
	1		1	1	1 '	1	1

May 23, 2019

Page 18 of 103

P- SHIPSPRAY	-	Outside Vessel Painting- manual spray painting	-	-	_	_	_
-----------------	---	--	---	---	---	---	---

Painting Operations/P-SHIPBRUSH

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
P- SHIPBRUSH	-	General facility-wide marine coating operations, brush, roller, and touch-up application on vessels and vessel partsmanual brush painting	1	1	-	-	-

Painting Operations/Group P-X15

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
274-E13	274-S13	Plate Preparation & Inspection, paint booth	-	Dry filter (paper), 90% design control efficiency	274-C13	PM-10	-
275-E4	275-S4	Shape Preparation, paint booth	_	Dry filter (paper), 90% design control efficiency	275-C4	PM-10	-
275-E6	275-S6	Shape Preparation, paint booth	-	Dry filter (paper), 90% design control efficiency	275-C6	PM-10	-

Painting Operations/Group P-FAC

Emission	Stack ID	Emission Unit Description	Size/Rated	Pollution Control Device	PCD ID	Pollutant	Applicable
Unit ID	Stack ID	Emission Unit Description	Capacity*	(PCD) Description	PCDID	Controlled	Permit Date

May 23, 2019 Page 19 of 103

P-FAC	_	General facility-wide non-vessel brush, roller, spray and touch-up painting operations- manual brush and spray painting	-	-	-	-	-
103-E2	103-S2	Maintenance Shop, paint booth	-	Filter (paper), 90% design control efficiency	103-C2	PM-10	-

Satellite Blast and Coat Facility

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
SBF-E1	SBF-S1	Abrasive blasting process equipment, located in an enclosed fabric-covered shelter, custom design	18,000 lbs/hr	Portable dust collectors w/ high efficiency cartridge filters, 99% design control efficiency	SBF-C1	PM/PM-10	6/7/10 NSR Permit
SPF-E1	SPF-S2	Marine coating process equipment, located in an enclosed fabric-covered shelter, custom design	76.8 gal coating/hr	Portable dust collectors w/ high efficiency cartridge filters, 99% design control efficiency	SPF-C1	PM/PM-10	6/7/10 NSR Permit

Blast and Coat Facility West

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
4730-SBCF- E1	4730- SBCF-S1	Abrasive blasting process equipment, located in an enclosed fabric-covered shelter, custom design	18,000 lbs/hr	Portable dust collectors w/ high efficiency cartridge filters, 99.999% design control efficiency	4730- SBCF-C1	PM/PM-10	11/17/14 NSR Permit
4730-SBCF- E2	4730- SBCF-S2	Marine coating process equipment, located in an enclosed fabric-covered shelter, custom design	96 gal coating/hr	Dry filters, 99% control efficiency	4730- SBCF-C2	PM/PM-10	11/17/14 NSR Permit
4730-SBCF- E3	4730- SBCF-S3	Marine coating process equipment, located in an enclosed fabric-covered shelter, custom design	96 gal coating/hr	Dry filters, 99% control efficiency	4730- SBCF-C3	PM/PM-10	11/17/14 NSR Permit

May 23, 2019 Page 20 of 103

Specialty Shops

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
64-E1	64-S1	Electrical Shop drill press/sander (not used for wood)	-	Cyclone, 90% design control efficiency	64-C1	PM	_
64-E9		Grinding metal	-			PM	-
64-E2	64-S2	Electrical Shop saw	Т	Baghouse, 95% design control efficiency	64-C2	PM	-
60-E2	60-S2	Grinding operations	-	Cartridge filters Donaldson Torit Downflow DFO3-12, 99% design control efficiency	60-C2	PM	-
4896-E1	4896-S1	Melamine Operations (2 Milling Machines, Band Saw, and Lathe)	_	Dust collector, Donaldson Torit Model 90- 219-5, 99% control efficiency	4896-C1	PM	_
5-E3	5-S3 a, b	Costa 3-stage dry Deburring Machine Model No: MD5-CVC1350	2955 ft/hr	DiversiTech W5000 wet dust collector	5-C3	PM PM10	8/2/16 NSR permit
FAC-PW	Building vents	Facility-wide parts- washer operations	-	-	_	-	-
64-E3	64-S3	Bayco burn-out oven, Model BB-288 (propane), 1979	1.5 MMBTU/hr	Afterburner, 1 MMBTU/hr	64-C3	PM	10/18/1979 NSR Permit

Miscellaneous Activities

Emission Unit ID Stack ID Emission Unit	escription Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
--	---------------------------------	---	--------	-------------------------	---------------------------

FAC-BLST	_	External abrasive blasting (Facility-wide)	-	-	_	_	_
FAC-GRIT	_	Utility grit off-loading (Facility-wide)	-	-	-	_	_
50-E1	50-S1	Wheelabrator #11980 Table Blast Unit -Abrasive blasting/steel shots	2.5 tons/hr	Cartridge filters, Torit Ultraweb Downflow II DFT3-12, 99% design control efficiency	50-C1	PM	_
4730-NB	4730-NR (Northside Reclaim) / 4730-NLE (Northside Local Exhaust)	Abrasive blasting/steel shot - North Blast Room	-	Torit Ultraweb Cartridge Dust collector, 99.0% design control efficiency	4730- NRC	PM	-
4730-SB	4730-SR (Southside Reclaim) / 4730-SLE (Southside Local Exhaust)	Abrasive blasting/steel shot - South Blast Room	-	Torit Ultraweb Cartridge Dust collector, 99.0% design control	4730- SRC	PM	-
201-E1	201-S1	Abrasive blasting/steel shot (10/1970), Wheelabrator #7614	2.5 tons/hr	Cartridge filters Torit UltraWeb Downflow DFO3-12, 99% design control efficiency	201-C1	PM	-
PORT-DC	Various	Various portable dust collectors for abrasive blasting and welding operations	-	Various portable dust collectors	Various	PM	_
4701-E1	4701-S1	Abrasive blasting/steel grit, garnet, aluminum oxide	384 lbs/hr	Baghouse, MISCO/IPEC custom-made units, 95 % design control efficiency	4701-C1	PM	_

May 23, 2019

Page 22 of 103

1768-E1	1768-S1	Grinding/cutting/welding - Welding School	-	Cyclone, Torit, 90 % design control efficiency	1768-C1	PM	_
FAC-WELD	ı	Welding - facility-wide	_	_	_	_	_
FAC-GLUE	-	Gluing operations - facility-wide	_	_	_	_	-
FAC-SOLV	_	Solvent/thinner usage - facility-wide	-	_	_	_	_
SS-E1	-	Service station - gasoline	_	_	_	_	_
SS-E2	-	Service station - diesel	_	-	_	_	_
5-E2	5-S2	Wheelabrator /Tumblast Machine (Blast Unit)- Abrasive Blasting /steel shots	2.5 tons/hr	Baghouse, Wheelabrator Dustube Model 112-AC, 95.0% design control efficiency	5-C2	PM	-
205-B1	205-S1	Powder coating steel shot blast unit	-	Baghouse, Wheelabrator USF 44, design control efficiency 95%	205-BC1	PM	12/17/15 NSR Permit
205-B2	205-S2	Powder coating steel shot blast unit	-	Baghouse, Pangborn Model 25-5-8, Type HP-1, design control efficiency 95%	205-BC2	PM	12/17/15 NSR Permit
FAC-REMED	-	HAP contained in remediation materials removed during all site remediation, as defined in 40 CFR §63.7657	-	_	_	-	_

^{*}The Size/Rated capacity and PCD efficiency is provided for informational purposes only, and is not an applicable requirement.

Page 23 of 103

III. Boiler Requirements - Small Boilers and Process Heaters

Limitations

- 1. Boiler Requirements Small Boilers, Process Heaters, and Hot Water Heater Limitations Limitations MACT, Subpart DDDDD (1744-E4, 1744-E5, 521-E1, 521-E2, 521-E3, 521-E4, 521-E5, 1796-E1, 1877-E1, 4768-E1, 4768-E2, and 4768-E3, 205-C1a, 205-C1b, LPV-NY1, LPV-SY1, 4931-WH1, 4931-WH2, and 4931-WH3) The permittee shall comply with the applicable limitations of 40 CFR 63, Subpart DDDDD (National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters) for each new or existing gas 1-fired boiler (as defined in §63.7490 and §63.7575) as follows:
 - a. Compliance with 40 CFR 63, Subpart DDDDD shall be achieved by the dates specified in §63.7495.
 - b. For existing units: The permittee shall comply with the applicable work practice standards in Table 3 (one-time energy assessment) and tune-up requirements in 40 CFR 63.7500(e). Boilers and process heaters in the units designed to burn gas 1 fuels subcategory are not subject to the emission limits in Tables 1 and 2 or 11 through 13, or the operating limits in Table 4.
 - c. For new units: The permittee shall comply with the applicable tune-up requirements in 40 CFR63.7500(e). Boilers and process heaters in the units designed to burn gas 1 fuels subcategory are not subject to the emission limits in Tables 1 and 2 or 11 through 13, or the operating limits in Table 4.
 - d. The permittee shall comply with the applicable general compliance requirements in §63.7505.
 - e. The permittee shall comply with the applicable initial compliance requirements in §63.7510 and §63.7530.

(9VAC5-80-110, 9VAC5-60-100, 40 CFR 63.7495, 63.7500, 63.7505, 63.7510, and 63.7530 (Subpart DDDDD))

2. Fuel Burning Equipment Requirements – Steel Preparation and Fabrication Equipment and Foundry Equipment - Limitations - Emissions Limits - (276-E1, 276-E2, and 550-E8, 550-E9, and 550-E13) - Emissions from each of the ovens and furnaces shall not exceed the limitations specified below:

PM emissions shall not exceed E lbs/MMBtu as calculated by the equation E=1.0906H^{-0.2594}, where H is the total capacity in MMBtu/hour.

SO₂ emissions shall not exceed 2.64 lbs/MMBtu.

(9VAC5-80-110, 9VAC5-40-900, and 9VAC5-40-930)

Page 24 of 103

3. Fuel Burning Equipment Requirements – Steel Preparation and Fabrication Equipment and Foundry Equipment - Limitations – Visible Emissions Limits - (276-E1, 276-E2, and 550-E8, 550-E9, and 550-E13) - Visible emissions from each of the ovens and furnaces shall not exceed 20 percent (20%) opacity except for one six-minute period in any one hour of not more than 60% opacity as determined by EPA Method 9.

(9VAC5-80-110 and 9VAC5-40-940)

Testing and Monitoring

- 4. **Boiler Requirements Steel Preparation and Fabrication Equipment and Foundry Equipment - Testing and Monitoring SO₂ and PM₁₀ (276-E1, 276-E2, 550-E8, 550-E9, and 550-E13) -** Emissions of SO₂ and PM₁₀ shall be monitored by keeping records of throughput, type of fuel used, and appropriate data on fuel properties. The permittee shall calculate emissions of SO₂ and PM₁₀ in pounds per million BTU daily using daily fuel throughputs, fuel sulfur contents, and appropriate emission factors from the current AP-42. In lieu of a daily calculation, the permittee may make a one-time demonstration of maximum potential SO₂ and PM₁₀ emissions in pounds per million BTU using maximum fuel throughput, fuel sulfur content, and appropriate emission factors from AP-42, 5th Edition. The permittee shall maintain records of daily calculations for the most recent 5-year period. If the one-time maximum emission demonstration option is chosen, the permittee shall maintain a record of such a demonstration for the life of the affected units. (9VAC5-80-110)
- 5. Boiler Requirements Steel Preparation and Fabrication Equipment and Foundry Equipment Monitoring Visible Emissions Observations/Evaluations (276-E1, 276-E2, 550-E8, 550-E9, and 550-E13) The permittee shall observe each stack of ovens and furnaces for visible emissions for at least six minutes once per month during daylight hours of operation if the unit operates that month. If visible emissions are noted, corrective action shall be taken to eliminate the visible emissions. If visible emissions continue after corrective action, a visible emissions evaluation (VEE) shall be immediately conducted on the stack for at least six minutes in accordance with Method 9 (40 CFR 60, Appendix A). If the VEE opacity average for the stack exceeds ten percent (10%), the VEE shall continue for one hour from initiation to determine compliance with the opacity limits. Results of observations and/or VEEs shall be recorded in an operation log. Records of observations shall include the following:
 - a. The name of the observer,
 - b. Date and time of the observation,
 - c. An indication that the process was operating,
 - d. An indication of the presence or absence of visible emissions, and
 - e. Any corrective action taken to eliminate visible emissions, including the date and time the process was shut down and/or repairs were completed.

If a VEE is conducted, records shall be in accordance with Method 9 (40 CFR 60, Appendix A). (9VAC5-80-110)

Page 25 of 103

- 6. **Boiler Requirements Small Boilers and Process Heaters Testing and Monitoring MACT, Subpart DDDDD (All Units)** The permittee shall comply with the applicable testing and monitoring requirements of 40 CFR 63, Subpart DDDDD (National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters) for each new or existing gas 1-fired boiler (as defined in §63.7490 and §63.7575) as follows:
 - a. The permittee shall comply with the applicable tune-up requirements in §63.7515.
 - b. The permittee shall comply with the applicable continuous compliance requirements in §63.7540. Boilers and process heaters in the units designed to burn gas 1 fuels subcategory with a heat input capacity of less than or equal to 5 million Btu per hour must complete a tune-up every 5 years as specified in §63.7540(a)(12).

(9VAC5-80-110, 9VAC5-60-100, 40 CFR 63.7515, and 63.7540 (Subpart DDDDD))

Notifications, Recordkeeping, and Reporting

- 7. **Boiler Requirements Steel Preparation and Fabrication Equipment and Foundry Equipment - Notifications, Recordkeeping, and Reporting (276-E1, 276-E2, 550-E8, 550-E9, and 550-E13) -** The permittee shall maintain records of all required visible emissions evaluations and/or observations and all required emissions calculations for the ovens and furnaces. These visible emissions evaluations and/or observations records and monthly emissions calculations shall be maintained at the facility for inspection by DEQ for the most recent 5-year period. If a one-time emissions calculation is performed to demonstrate compliance with the SO₂ and PM₁₀ limitations outlined in this section, the permittee shall maintain a record of such demonstration for the life of the affected units. (9VAC5-80-110)
- 8. **Boiler Requirements Small Boilers and Process Heaters Notifications, Recordkeeping, and Reporting MACT, Subpart DDDD (All Units) -** The permittee shall comply with the applicable notification, recordkeeping, and reporting requirements of 40 CFR 63, Subpart DDDDD (National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters) for each new or existing gas 1-fired boiler (as defined in §63.7490 and §63.7575), as follows:
 - a. The permittee shall comply with the applicable notification requirements in §63.7545.
 - b. The permittee shall comply with the applicable reporting requirements in §63.7550.
 - c. The permittee shall comply with the applicable recordkeeping requirements in §63.7555 and §63.7560.

(9VAC5-80-110, 9VAC5-60-100, 40 CFR 63.7545, 63.7550, 63.7555, and 63.7560 (Subpart DDDDD))

Page 26 of 103

IV. Boiler Requirements - Barge-Mounted Boilers and Steam Plant Boilers

Limitations

9. **Barge-Mounted Boilers - Emission Limits - (FTSF-E1 and FTSF-E2)** - Short-term emissions from the operation of <u>each</u> modified barge-mounted boiler shall not exceed the limits specified below:

Particulate Matter (PM)		0.4 lbs/hour
PM_{10}		1.7 lbs/hour
PM _{2.5}		1.7 lbs/hour
Sulfur Dioxide		0.1 lbs/hour
Nitrogen Oxides (as NO ₂)	0.17 lbs/MMBtu	38.1 lbs/hour
Carbon Monoxide		18.4 lbs/hour
Volatile Organic Compounds		1.2 lbs/hour

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits may be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Conditions 10, 11, 12, 13, and 27 of this permit.

(9VAC5-80-110 and Condition 12 of the 2/7/18 NSR Permit)

- 10. **Barge-Mounted Boilers Emission Limits Visible Emission Limit (FTSF-E1 and FTSF-E2)** Visible emissions from each modified barge-mounted boiler shall not exceed 10 percent (10%) opacity, except during one six-minute period in any one hour in which visible emissions shall not exceed 20 percent (20%) opacity, as determined by the EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown, and malfunction. (9VAC5-80-110 and Condition 13 of the 2/7/18 NSR Permit)
- 11. **Barge-Mounted Boilers Emission Limits Emission Controls (FTSF-E1 and FTSF-E2)** Nitrogen oxide (NO_X) emissions from each modified barge-mounted boiler shall be controlled by the use of low-NO_X burners. The low-NO_X burners shall be installed and operated in accordance with the manufacturer's specifications.

(9VAC5-80-110 and Condition 9 of the 2/7/18 NSR Permit)

12. **Barge-Mounted Boilers Emission Limits - Emission Controls - (FTSF-E1 and FTSF-E2)** - Carbon Monoxide (CO) and volatile organic compound (VOC) emissions from each modified barge-mounted boiler shall be controlled by the use of good combustion operating practices. (9VAC5-80-110 and Condition 10 of the 2/7/18 NSR Permit)

13. **Barge-Mounted Boilers Emission Limits - Fuel - (FTSF-E1 and FTSF-E2)** - The approved fuel for each modified barge-mounted boiler is natural gas. A change in the fuel shall be considered a change in the method of boiler operation and may require a new or amended permit. However, if a change in the fuel is not subject to new source review permitting requirements, this condition should not be construed to prohibit such a change.

(9VAC5-80-110 and Condition 11 of the 2/7/18 NSR Permit)

14. **Powerhouse Boilers - Emission Limits** – **(78-E4)** – Short-term emissions from the operation of the powerhouse boiler 78-E4 shall not exceed the limits specified below:

Particulate Matter (PM)		0.2 lbs/hour
PM_{10}		0.7 lbs/hour
PM _{2.5}		0.7 lbs/hour
Sulfur Dioxide		0.1 lbs/hour
Nitrogen Oxides (as NO ₂)	0.20 lbs/MMBtu	19.9 lbs/hour
Carbon Monoxide		8.2 lbs/hour
Volatile Organic Compounds		0.5 lbs/hour

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits may be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Conditions 17, 18, 19, and 20 of this permit.

(9VAC5-80-110 and Condition 6 of the 2/7/2018 NSR Permit)

15. **Powerhouse Boilers - Emission Limits – (78-E5 and 78-E6)** - Short-term emissions from the operation of each of the powerhouse boilers shall not exceed the limits specified below:

Particulate Matter (PM)		0.3 lbs/hour
PM_{10}		1.1 lbs/hour
PM _{2.5}		1.1 lbs/hour
Sulfur Dioxide		0.1 lbs/hour
Nitrogen Oxides (as NO ₂)	0.20 lbs/MMBtu	29.0 lbs/hour
Carbon Monoxide		11.9 lbs/hour
Volatile Organic Compounds		0.8 lbs/hour

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits may be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Conditions 17, 18, 19, and 20 of this permit.

(9VAC5-80-110, Condition 7 of the 2/7/2018 NSR Permit, 40 CFR 60.44b(a)(1) Subpart Db)

- Powerhouse Boilers Emission Limits (78-E5 and 78-E6) Compliance with the short-term NO_X emission limit heat input (0.20 lbs/MMBtu) shall apply at all times including periods of startup, shutdown, or malfunction. Compliance with this emission limit is determined on a 30-day rolling average basis. (9VAC5-80-110, 40 CFR 60.44b(a) and (h) (Subpart Db))
- 17. **Powerhouse Boilers Visible Emissions (78-E4, 78-E5, and 78-E6)** Visible emissions from each powerhouse boilers shall not exceed 20 percent (20%) opacity, except during one six-minute period in any one hour in which visible emissions shall not exceed 30 percent (30%) opacity, as determined by the EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown, and malfunction.

 (9VAC5-80-110 and Condition 8 of the 2/7/2018 NSR Permit)
- 18. **Powerhouse Boilers Emission Controls** (**78-E4, 78-E5, and 78-E6**) Nitrogen oxide (NO_X) emissions from <u>each</u> powerhouse boiler shall be controlled by the use of low-NO_X burners and flue gas recirculation (FGR). The low-NO_X burners shall be installed and operated in accordance with the manufacturer's specifications.

(9VAC5-80-110 and Condition 3 of the 2/7/2018 NSR Permit)

- 19. **Powerhouse Boilers Emission Controls (78-E4, 78-E5, and 78-E6)** Carbon Monoxide (CO) and volatile organic compound (VOC) emissions from each powerhouse boiler shall be controlled by the use of good combustion operating practices. (9VAC5-80-110 and Condition 4 of the 2/7/2018 NSR Permit)
- 20. **Powerhouse Boilers Fuel (78-E4, 78-E5, and 78-E6)** The approved fuel for each powerhouse boiler is natural gas. A change in the fuel shall be considered a change in the method of boiler operation and may require a new or amended permit. However, if a change in the fuel is not subject to new source review permitting requirements, this condition should not be construed to prohibit such a change. (9VAC5-80-110 and Condition 5 of the 2/7/2018 NSR Permit)
- 21. **Powerhouse Boilers Limitations (78-E4, 78-E5, and 78-E6)** At all times, you must operate and maintain any affected source (as defined in §63.7490), including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

(9VAC5-80-110 and 40 CFR 63.7500 (Subpart DDDDD))

- 22. **Powerhouse Boilers Limitations MACT, Subpart DDDDD** (**78-E4, 78-E5, and 78-E6**) The permittee shall comply with the applicable limitations of 40 CFR 63, Subpart DDDDD (National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters) for each new powerhouse boiler, as follows:
 - a. Compliance with 40 CFR 63, Subpart DDDDD shall be achieved by the dates specified in §63.7495.
 - b. The permittee shall comply with the applicable tune-up requirements in 40 CFR 63.7500(e). Boilers and process heaters in the units designed to burn gas 1 fuels subcategory are not subject to the emission limits in <u>Tables 1 and 2 or 11 through 13</u>, or the operating limits in <u>Table 4</u> (Subpart DDDDD).
 - c. The permittee shall comply with the applicable general compliance requirements in §63.7505.
 - d. The permittee shall comply with the applicable initial compliance requirements in §63.7510 and §63.7530.

(9VAC5-80-110, 9VAC5-60-100, and 40 CFR 63.7495, 63.7500, 63.7505, 63.7510, and 63.7530 (Subpart DDDDD))

23. Combined Barge-Mounted and Powerhouse Boilers Heat Input Limitation - Total - (FTSF-E1, FTSF-E2, 78-E4, 78-E5, and 78-E6) - The combined natural gas consumption of the powerhouse and modified barge-mounted boilers shall not exceed 2,166.7 million cubic feet per year, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.

(9VAC5-80-110 and Condition 15 of the 2/7/18 NSR Permit)

24. Combined Barge-Mounted and Powerhouse Boilers Emission Limits - (78-E4, 78-E5, 78-E6, FTSF-E1, and FTSF-E2) - Annual emissions from the combined operation of the powerhouse and modified bargemounted boilers shall not exceed the limits specified below:

Particulate Matter (PM)	2.1 tons/year
PM_{10}	8.2 tons/year
PM _{2.5}	8.2 tons/year
Sulfur Dioxide	0.7 tons/year
Nitrogen Oxides (as NO ₂)	221.0 tons/year
Carbon Monoxide	91.0 tons/year
Volatile Organic Compounds	6.0 tons/year

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits may be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Conditions 9, 14, 15, 23, and 35 of this permit.

(9VAC5-80-110 and Condition 16 of the 2/7/18 NSR Permit)

25. Combined Barge-Mounted and Powerhouse Boilers - Emission Limits - (78-E4, 78-E5, 78-E6, FTSF-E1 and FTSF-E2) - The combined emission limits (Condition 24) on the powerhouse boilers and the barge boilers are PSD compliance emission limits. These emission limits do not provide any relief from obtaining an approval for any future physical change or change in the method of operation of any of the boilers, or the addition or modification of any steam-consuming processes at the facility. The latter is true even if the facility does not request a change in the emission limits. Furthermore, by accepting this emission limit and agreeing to consider the five (5) boilers as one emissions unit for NSR/PSD purposes, any future applicability determinations shall involve all five boilers, e.g. should major NSR/PSD be triggered for any one boiler or process change, BACT/LAER is required for all five boilers. If the permittee finds it necessary to relax the emission limits at some future date, the source obligation requirements of 9VAC5-80-1605(C) and 40 CFR 52.21(r)(4) shall apply.

(9VAC5-80-110 and Condition 17 of the 2/7/18 NSR Permit)

26. **Powerhouse Boilers - Emission Controls - (78-E4, 78-E5, and 78-E6)** – Except where this permit is more restrictive than the applicable requirement, the Powerhouse Boilers shall be operated in compliance with the requirements of 40 CFR 60, Subparts Db and Dc. (9VAC5-80-110 and Condition 1 of the 2/7/18 NSR Permit)

Testing and Monitoring

27. **Barge-Mounted Boilers - Stack Test - (FTSF-E1 and FTSF-E2)** - Initial performance tests shall be conducted for NO_X emissions from each modified barge mounted boiler to determine compliance with the NO_X emission limits contained in Condition 9 of this permit. The tests shall be performed and demonstrate compliance within 60 days after achieving the maximum production rate at which the modified boilers will be operated but in no event later than 180 days, unless the Tidewater Regional Office approves an extension not to exceed 360 days, after start-up of the modified boilers. Any extension request shall be submitted to the Tidewater Regional Office, in writing, at least 30 days prior to the end of the initial 180-day period. Tests shall be conducted and reported and data reduced as set forth in 9VAC5-50-30. The details of the tests are to be arranged with the Director, Tidewater Regional Office. The permittee shall submit a test protocol at least 30 days prior to testing. One (1) copy of the test results shall be submitted to the Director, Tidewater Regional Office within 45 days after test completion and shall conform to the test report format enclosed with this permit.

(9VAC5-80-110 and Condition 14 of the 2/7/2018 NSR Permit)

Barge-Mounted Boilers Requirements - Testing and Monitoring SO₂ and PM₁₀ - (FTSF-E1 and FTSF-E2) - Emissions of SO₂ and PM₁₀ shall be monitored by keeping records of throughput, type of fuel used, and appropriate data on fuel properties. The permittee shall calculate emissions of SO₂ and PM₁₀ in pounds per million BTU daily using daily fuel throughputs, fuel sulfur contents, and appropriate emission factors from the current AP-42. In lieu of a daily calculation, the permittee may make a one-time demonstration of

Page 31 of 103

maximum potential SO_2 and PM_{10} emissions in pounds per million BTU using maximum fuel throughput, fuel sulfur content, and appropriate emission factors from AP-42, 5th Edition. The permittee shall maintain records of daily calculations for the most recent 5-year period. If the one-time maximum emission demonstration option is chosen, the permittee shall maintain a record of such a demonstration for the life of the affected units. (9VAC5-80-110)

Barge-Mounted and Powerhouse Boilers - Emissions Testing - (FTSF-E1, FTSF-E2, 78-E4, 78-E5, and 78-E6) - The powerhouse and barge-mounted boilers shall be constructed so as to allow for emissions testing upon reasonable notice at any time, using appropriate methods. Sampling ports shall be provided when requested and safe sampling platforms and access shall be provided. (9VAC5-80-110 and Condition 2 of the 2/7/18 NSR Permit)

- 30. Barge-Mounted and Powerhouse Boilers Monitoring Visible Emissions Observations/Evaluations (FTSF-E1, FTSF-E2, 78-E4, 78-E5, and 78-E6) The permittee shall observe the stack of each boiler for visible emissions for at least six minutes once per month during daylight hours of operation if the unit operates that month. If visible emissions are noted, corrective action shall be taken to eliminate the visible emissions. If visible emissions continue after corrective action, a visible emissions evaluation (VEE) shall be immediately conducted on the boiler stack for at least six minutes in accordance with Method 9 (40 CFR 60, Appendix A). If the VEE opacity average for the boiler stack exceeds ten percent (10%), the VEE shall continue for one hour from initiation to determine compliance with the opacity limits. Results of observations and/or VEEs shall be recorded in an operation log. Records of observations shall include the following:
 - a. The name of the observer.
 - b. Date and time of the observation.
 - c. An indication that the process was operating.
 - d. An indication of the presence or absence of visible emissions.
 - e. Any corrective action taken to eliminate visible emissions, including the date and time the process was shut down and/or repairs were completed.

If a VEE is conducted, records shall be in accordance with Method 9 (40 CFR 60, Appendix A). (9VAC5-80-110)

31. **Powerhouse Boiler Requirements - Testing and Monitoring –NSPS, Subpart Db** - (**78-E5 and 78-E6**) - Upon the completion of the replacement of each powerhouse boiler, the permittee shall comply with the applicable testing and monitoring requirements of 40 CFR 60, Subpart Db (Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units) for each new applicable powerhouse boiler, as follows:

Page 32 of 103

- a. The permittee shall comply with the applicable compliance and performance test methods requirements in §60.46b.
- b. The permittee shall comply with the applicable monitoring requirements in §60.48b.

(9VAC5-80-110, 9VAC5-50-410, 40 CFR 60 Subpart Db)

- 32. **Powerhouse Boiler Requirements Testing and Monitoring MACT, Subpart DDDDD (78-E4, 78-E5, and 78-E6) -** Upon the completion of the replacement of each powerhouse boiler, the permittee shall comply with the applicable testing and monitoring requirements of 40 CFR 63, Subpart DDDDD (National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters) for each new powerhouse boiler, as follows:
 - a. The permittee shall comply with the applicable tune-up requirements in §63.7515.
 - b. The permittee shall comply with the applicable continuous compliance requirements in §63.7540. For boilers and process heaters with a continuous oxygen trim system that maintains an optimum air to fuel ratio, the permittee must conduct a tune-up of the boiler or process heater every 5 years as specified in §63.7540(a)(10)(i) through (vi).

(9VAC5-80-110, 9VAC5-60-100, and 40 CFR 63 Subpart DDDDD)

33. **Powerhouse Boiler Requirements - Testing and Monitoring - (All Units) -** If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the appropriate method(s) in accordance with procedures approved by the DEQ. (9VAC5-80-110)

Notifications, Reporting, and Recordkeeping

- 34. **Barge-Mounted Boilers Initial Notifications (FTSF-E1 and FTSF-E2) -** The permittee shall furnish written notification to the Tidewater Regional Office of:
 - a. The actual date on which the modification to each barge-mounted boiler commenced, within 30 calendar days after such date.
 - b. The actual start-up date of each modified barge-mounted boiler within 15 calendar days after such date.

(9VAC5-80-110 and Condition 19 of the 2/7/18 NSR Permit)

35. Barge-Mounted and Powerhouse Boilers – Recordkeeping - (78-E4, 78-E5, 78-E6, FTSF-E1, and FTSF-E2) - The permittee shall maintain records of emission data and operating parameters as necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Tidewater Regional Office. These records shall include, but are not limited to:

- a. The combined natural gas consumption of the powerhouse boilers, in million cubic feet per year, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
- b. The combined natural gas consumption of the barge-mounted boilers, in million cubic feet per year, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
- c. The daily emissions of SO_2 and PM_{10} if a one-time demonstration of maximum potential SO_2 and PM_{10} emissions in pounds per million BTU as described in Condition 28 was not conducted.
- d. The visible emissions observations for the stack of each boiler as described in Condition 30.
- e. Scheduled and unscheduled maintenance and operator training.
- f. Results of all stack tests.

These records shall be available for inspection by the DEQ and shall be current for the most recent five (5) years.

(9VAC5-80-110 and Condition 18 of the 2/7/18 NSR Permit)

- Powerhouse Boiler Requirements Notifications, Reporting, and Recordkeeping NSPS, Subpart Db (78-E5 and 78-E6) Upon the completion of the installation of powerhouse boilers 78-E5 and 78-E6, the permittee shall comply with the applicable notification, reporting, and recordkeeping requirements of 40 CFR 60.49b.
 - (9VAC5-80-110, 9VAC5-50-410, and 40 CFR 60 Subpart Db)
- 37. **Powerhouse Boiler Requirements Notifications, Reporting, and Recordkeeping NSPS, Subpart Dc (78-E4) -** Upon the completion of the installation of powerhouse boiler 78-E4, the permittee shall comply with the applicable notification, reporting, and recordkeeping requirements of 40 CFR 60.48c(a) and shall maintain records of the amount of fuel combusted during each calendar month per §60.48c(g). (9VAC5-80-110, 9VAC5-50-410, and 40 CFR 60 Subpart Dc)
- 38. **Powerhouse Boiler Requirements Notifications, Reporting, and Recordkeeping MACT, Subpart DDDDD (78-E4, 78-E5, and 78-E6) -** Upon the completion of the installation of each powerhouse boiler (Unit Ref. Nos. 78-E4, 78-E5, and 78-E6), the permittee shall comply with the applicable notification, reporting, and recordkeeping requirements of 40 CFR 63, Subpart DDDDD (National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters) for each new powerhouse boiler, as follows:
 - a. The permittee shall comply with the applicable notification requirements in §63.7545.
 - b. The permittee shall comply with the applicable reporting requirements in §63.7550.

Page 34 of 103

c. The permittee shall comply with the applicable recordkeeping requirements in §63.7555 and §63.7560.

(9VAC5-80-110, 9VAC5-60-100, and 40 CFR 63 Subpart DDDDD)

V. Engine/Generator Requirements

Limitations

39. **Engine/Generator Requirements Limitations – Emission Controls – (GSE-M290)** - Nitrogen oxides (NO_X) emissions from the rental engine-generator set shall be controlled by direct diesel injection (DI), turbocharged engine (TC), charge air cooler and electronic control module (ECM). The permittee shall maintain documentation that demonstrates the DI, TC, charge air cooler and ECM have been installed on the engine-generator set.

(9VAC5-80-110 and Condition 1 of the 8/7/2018 NSR Permit)

- 40. **Engine/Generator Requirements Limitations Emission Controls (GSE-M290)** Visible emissions, particulate emissions, carbon monoxide (CO) emissions, and volatile organic compound (VOC) emissions shall be controlled by the use of good operating practices and performing appropriate maintenance in accordance with the manufacturer recommendations.

 (9VAC5-80-110 and Condition 2 of the 8/7/2018 NSR Permit)
- 41. **Engine/Generator Requirements Limitations Operation (GSE-M290)** The permittee shall operate and maintain the engine-generator set and control devices according to the manufacturer's written instructions or procedures developed by the permittee that are approved by the engine manufacturer. In addition, the permittee may only change those settings that are permitted by the manufacturer and do not increase air emissions.

(9VAC5-80-110 and Condition 4 of the 8/7/2018 NSR Permit)

- 42. Engine/Generator Requirements Limitations Operation (GSE-M290) The rental enginegenerator set shall only be operated in the following modes:
 - a. In situations that arise from sudden and reasonably unforeseeable events where the primary energy or power source is disrupted or disconnected due to conditions beyond the control of an owner or operator of a facility including:
 - i. A failure of the electrical grid;
 - ii. On-site disaster or equipment failure; or
 - iii. Public service emergencies such as flood, fire, natural disaster, or severe weather conditions.
 - b. For periodic maintenance, testing, and operational training.

(9VAC5-80-110 and Condition 5 of the 8/7/2018 NSR Permit)

43. **Engine/Generator Requirements Limitations - Operating Hours - (GSE-10025550, GSE-10025551, and GSE-M290) -** Each emergency generator shall not operate more than 500 hours per year, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.

(9VAC5-80-110, Condition 3 of the 11/21/11 NSR Permit, and Condition 6 of the 8/7/2018 NSR Permit)

44. **Engine/Generator Requirements Limitations - Fuel - (GSE-10025550 and GSE-10025551) -** The approved fuel for the emergency generators is distillate oil. A change in the fuel may require a permit to modify and operate.

(9VAC5-80-110 and Condition 4 of the 11/21/11 NSR Permit)

45. **Engine/Generator Requirements Limitations - Fuel - (GSE-10025550 and GSE-10025551) -** The distillate oil shall meet the specifications below:

DISTILLATE OIL which meets the ASTM D396 specification for numbers 1 or 2 fuel oil:

Maximum sulfur content per shipment: 0.0015 %

(9VAC5-80-110 and Condition 5 of the 11/21/11 NSR Permit)

- 46. **Engine/Generator Requirements Limitations Fuel (GSE-M290) -** The approved fuel for the rental engine-generator set is diesel fuel. The diesel fuel shall meet the ASTM D975 specification for S15 diesel fuel oil with a maximum sulfur content per shipment of 0.0015%. A change in the fuel shall be considered a change in the method of operation of the engine-generator set and may require a new or amended permit. However, if a change in fuel is not subject to new source review permitting requirements, this condition should not be construed to prohibit such a change.

 (9VAC5-80-110 and Condition 7 of the 8/7/18 NSR Permit)
- 47. Engine/Generator Requirements Limitations Emissions Limits (GSE-10018416, GSE-10017399, GSE-10018412, GSE-10018413, PSE-10018735, PSE-10018737, GSE-10022299, GSE-10025550, GSE-10025551, GSE-10028237 and PSF-10017424, PSF-10022335, and PSF-10028208) Emissions from the operation of the stationary diesel emergency engines/generators constructed after 7/11/2005 and manufactured after 4/1/2006 and the operation of the stationary diesel emergency fire pumps constructed after 7/11/2005 and manufactured after 7/1/2006 (Unit Ref. Nos. PSF-10017424, PSF-10022335, and PSF-10028208) shall not exceed the emissions limitations for CO, NO_X, PM, and VOC outlined in 40 CFR 60.4205.

(9VAC5-80-110 and 40 CFR 60.4205 (NSPS Subpart IIII))

48. **Engine/Generator Requirements - Limitations – Emissions Limits** – (GSE-M290) – Emissions from the operation of the rental engine-generator set shall not exceed the limits specified below:

Nitrogen Oxides (as NO₂) 42.2 lbs/hour 10.6 tons/year

Carbon Monoxide 2.3 lbs/hour 0.6 tons/year

Page 36 of 103

These emissions are derived from the estimated overall emissions contribution from the operating limits. Exceedance of the operating limits may be considered credible evidence of the exceedance of emissions limits. Compliance with these emissions limits may be determined as stated in Conditions 39, 41, 43, 67, 52, and 69 of this permit.

(9VAC5-80-110 and Condition 9 of the 8/7/18 NSR Permit)

49. Engine/Generator Requirements - Limitations – Emissions Limits – (GSE-10025550 and GSE-10025551) - Emissions from the operation of the emergency generators shall not exceed the limits specified below:

	<u>Each</u>	Combined
Nitrogen Oxides (as NO ₂)	23.4 lbs/hour	11.7 tons/year
Carbon Monoxide	5.3 lbs/hour	2.6 tons/year
Volatile Organic Compounds	2.1 lbs/hour	1.0 tons/year

These emissions are derived from the estimated overall emissions contribution from the operating limits. Exceedance of the operating limits may be considered credible evidence of the exceedance of emissions limits. Compliance with these emissions limits may be determined as stated in Conditions 43, 44, and 45 of this permit.

(9VAC5-80-110 and Condition 7 of the 11/21/11 NSR Permit)

- 50. **Engine/Generator Requirements Fuel Certification (GSE-M290)** The rental engine-generator set shall be equipped with a non-resettable hour metering device to monitor the operating hours. The non-resettable hour meter used to continuously measure the hours of operation for the engine –generator shall be observed by the owner with a frequency of not less than once each day the engine-generator set is operated. The owner shall keep a log of these observations.
 - (9VAC5-80-110 and Condition 3 of the 8/7/18 NSR Permit)
- 51. Engine/Generator Requirements Limitations Visible Emissions (GSE-10025550 and GSE-10025551) Visible emissions from each emergency generator shall not exceed 20 percent (20%) opacity, except during one six-minute period in any one hour in which visible emissions shall not exceed 30 percent (30%) as determined by EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown, and malfunction.

 (9VAC5-80-110 and Condition 8 of the 11/21/11 NSR Permit)
- 52. **Engine/Generator Requirements Limitations Visible Emissions (GSE-M290) -** Visible emissions from the rental engine-generator set exhaust shall not exceed 10 percent (10%) opacity, except during one six-minute period in any one hour in which visible emissions shall not exceed 20 percent (20%) opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown, and malfunction.

(9VAC5-80-110 and Condition 10 of the 8/7/18 NSR Permit)

Page 37 of 103

- 53. Engine/Generator Requirements Limitations Visible Emissions Limits (GSE-10002508, GSE-10040217, GSE-10040218, GSE-10040219, GSE-10040220, GSE-10048336, GSE-10048337, GSE-10050838, GSE-10056461, GSE-10018416, GSE-10022299, GSE-10059089, GSE10006537, GSE-10002521, GSE-10002509, GSE-10002704, GSE-10003018, GSE-10003735, GSE-10003942, GSE-10003998, GSE-10006964, GSE-10004013, GSE-10004043, GSE-10004745, GSE-10004528, GSE-10004569, GSE-7000001092, GSE-10005070, GSE-10005144, GSE-10008532, GSE-10008534, GSE-10008530, GSE-10008531, GSE-10008536, GSE-10008537, GSE-10008478, GSE-10015352, GSE-10015903, GSE-10018416, GSE-10017399, GSE-10018465, GSE-10018464, GSE-10018413, GSE-10018412, GSE-10025550, GSE-10025551, GSE-10028237) Visible Emissions from the stationary diesel emergency generators shall not exceed 20 percent (20%) opacity, except for one six-minute period in any one hour of not more than 30 percent (30%) as determined by EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown, and malfunction. (9VAC5-80-110 and 9VAC5-50-80)
- 54. Engine/Generator Requirements Visible Emissions Limits (PSF-10017424, PSE-10018737, PSE-10018735, PSF-10022335, PSF-10028208) Limitations Visible Emissions from the stationary diesel emergency pumps shall not exceed 20 percent (20%) opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 30 percent (30%) as determined by EPA Method 9 (40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown, and malfunction. (9VAC5-80-110 and 9VAC5-50-80)
- 55. Engine/Generator Requirements Limitations NSPS, Subpart IIII (GSE-M290, GSE-10017399, GSE-10018413, GSE-10018413, GSE-10018412, GSE-10018416, GSE-10040217, GSE-10040218, GSE-10040219, GSE-10040220, GSE-10048336, GSE-10048337, GSE-10050838, GSE-10056461, GSE-10018416, GSE-10022299, GSE-10025550, GSE-10025551, PSE-10018737, and PSE-10018735) The permittee shall comply with the requirements of 40 CFR 60, Subpart IIII (Standards of Performance for Stationary Compression Ignition Internal Combustion Engines) as applicable:
 - a. The permittee shall comply with the emissions standards in 40 CFR 60.4205 for emergency engines.
 - b. The permittee shall comply with the fuel requirements in 40 CFR 60.4207.
 - c. The permittee shall comply with the monitoring requirements in 40 CFR 60.4209.
 - d. The permittee shall comply with the compliance requirements in 40 CFR 60.4211.
 - e. The permittee shall comply with the testing requirements in 40 CFR 60.4212 and 40 CFR 60.4213.
 - f. The permittee shall comply with the notification, reporting, and recordkeeping requirements in 40 CFR 60.4214.
 - g. The permittee shall comply with the requirements of the General Provisions as outlined in Table 8 to 40 CFR 60 Subpart IIII.

Page 38 of 103

The permittee shall refer to the most current version of the applicable regulation for additional or revised requirements not included in this permit.

(9VAC5-80-110, 9VAC5-50-410, 40 CFR 60 Subpart IIII)

56. Engine/Generator Requirements –Limitations - NSPS, Subpart IIII - (GSE-M290, GSE-10017399, GSE-10018413, GSE-10018412, GSE-10018416, GSE-10040217, GSE-10040218, GSE-10040219, GSE-10040220, GSE-10048336, GSE-10048337, GSE-10050838, GSE-10056461, GSE-10022299, GSE-10025550, GSE-10025551, PSE-10018737, and PSE-10018735) - The permittee must operate the emergency stationary RICE according to the conditions in 40 CFR 60.4211(f)(1) and (2)(i) to be considered "emergency" under Subpart IIII. (60.4211(f)(2)(ii) and (iii) were remanded by the U.S. Court of Appeals for the District of Columbia Circuit in May 2015.) Any operation other than emergency operation and maintenance and testing as described in 60.4211(f)(1) and (2)(i) is prohibited. If the engine is not operated according to the requirements in paragraphs (f)(1) and (2)(i) of 40 CFR 60.6211, the engine will not be considered an emergency engine under 40 CFR 60, Subpart IIII and must meet all requirements for non-emergency engines.

(9VAC5-80-110, 9VAC5-60-100, and 40 CFR 60 Subpart IIII)

- 57. **Engine / Generator Requirements NSPS, Subpart JJJJ (GSE-10059089)** The permittee shall comply with the requirements of 40 CFR 60, Subpart JJJJ (Standards of Performance for Stationary Spark Ignition Internal Combustion Engines) as applicable:
 - a. The permittee shall comply with the emissions standards in Table 1 of 40 CFR 60, Subpart JJJJ for stationary SI ICE with a maximum engine power greater than or equal to 75 kW (100 HP).
 - b. The permittee shall comply with the fuel requirements in 40 CFR 60.4207.
 - c. The permittee shall comply with the monitoring requirements in 40 CFR 60.4235.
 - d. The permittee shall comply with the compliance requirements in 40 CFR 60.4243.
 - e. The permittee shall comply with the testing requirements in 40 CFR 60.4244.
 - f. The permittee shall comply with the notification, reporting, and recordkeeping requirements in 40 CFR 60.4245.
 - g. The permittee shall comply with the applicable requirements of the General Provisions as outlined in 40 CFR 60.4247.

The permittee shall refer to the most current version of the applicable regulation for additional or revised requirements not included in this permit.

(9VAC5-80-110, 9VAC5-50-410, 40 CFR 60 Subpart JJJJ)

58. **Engine / Generator Requirements – Limitations - (GSE-10059089)** - The permittee must operate the emergency stationary RICE according to the conditions in 40 CFR 60.4243(d)(1) and (2)(i) to be considered "emergency" under Subpart JJJJ. (60.4243(d)(2)(ii) and (iii) were remanded by the U.S. Court of Appeals for the District of Columbia Circuit in May 2015.) Any operation other than emergency operation and

Permit Number: TRO-60153 May 23, 2019 Page 39 of 103

maintenance and testing, as described in 60.4243(d)(1) and (2)(i) is prohibited. If the engine is not operated according to the requirements in paragraphs (d)(1) of 40 CFR 60.6243, the engine will not be considered an emergency engine under 40 CFR 60, Subpart JJJJ and must meet all requirements for non-emergency engines.

(9VAC5-80-110, 9VAC5-60-100, and 40 CFR 60 Subpart JJJJ)

59. **Engine/Generator Requirements - Limitations - MACT, Subpart ZZZZ** - The permittee shall comply with the applicable requirements of 40 CFR 63, Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines). The permittee shall refer to the most current version of the applicable regulation for additional or revised requirements not included in this permit.

(9VAC5-80-110, 9VAC5-60-100, and 40 CFR 63, Subpart ZZZZ)

60. Engine/Generator Requirements - Limitations – MACT, Subpart ZZZZ - (GSE-10002508, GSE-10006537, GSE-10003018, GSE-10003735, GSE-10004528, GSE-10004569, GSE-7000001092, GSE-10005144, GSE-10048337, GSE-10050838, GSE-10018416, GSE-10059089, GSE-10015352, GSE-10015903, GSE-10018464, PSE-10018737, PSE-10018735, and GSE-10025550)— New, reconstructed, or existing stationary sources with a site rating of more than 500 brake HP located at a major source of HAP emissions that meet either of the criteria in 40 CFR 63.6590(b)(1)(i) through (ii) do not have to meet the requirements of Subpart ZZZZ and of Subpart A of Part 40 except for the initial notification requirements of §63.6645(f).

(9VAC5-80-110, 9VAC5-60-100, and 40 CFR 63, Subpart ZZZZ)

61. Engine/Generator Requirements - Limitations MACT, Subpart ZZZZ – (GSE-10040217, GSE-10040218, GSE-10040219, GSE-10040220, GSE-10048336, GSE-10056461, GSE-10022299) - All new or reconstructed emergency stationary RICE with a site rating of less than or equal to 500 brake HP and installed after 6/12/2006 shall meet the requirements of 40 CFR 63, Subpart ZZZZ by meeting the requirements of 40 CFR 60 Subpart IIII, as applicable. No further requirements apply for such engines under 40 CFR 63, Subpart ZZZZ.

(9VAC5-80-110, 9VAC5-60-100, and 40 CFR 63.6590(c)(6) (Subpart ZZZZ))

- 62. **Engine/Generator Requirements Limitations MACT, Subpart ZZZZ** All existing emergency compression ignition (CI) stationary RICE with a site rating of less than or equal to 500 brake HP shall comply with the requirements of 40 CFR 63, Subpart ZZZZ by 5/3/2013. These units shall comply with the following requirements, as applicable:
 - a. The permittee shall comply with the emission limitations in 40 CFR 63.6602 (Table 2c).
 - b. The permittee shall comply with the fuel requirements in 40 CFR 63.6604(b) (for emergency CI engines with a site rating of more than 100 brake hp and a displacement of less than 30 liters per cylinder that use diesel fuel and operate or are contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in §63.6640(f)(2)(ii) and (iii) or that operate for the purpose specified in §63.6640(f)(4)(ii)).
 - c. The permittee shall comply with the general compliance requirements in 40 CFR 63.6605.

- d. The permittee shall comply with the monitoring, installation, collection, operation, and maintenance requirements in 40 CFR 63.6625(e), (f), (h), and (i).
- e. The permittee shall comply with the continuous compliance requirements in 40 CFR 63.6640.
- f. The permittee shall comply with the recordkeeping requirements in 40 CFR 63.6655 (except (c)) and 63.6660.
- g. The permittee shall comply with the reporting requirements as specified in Footnote 1 of Table 2c and 63.6650(h) (for emergency CI engines with a site rating of more than 100 brake hp that operate or are contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in §63.6640(f)(2)(ii) and (iii) or that operate for the purpose specified in §63.6640(f)(4)(ii)).
- h. The permittee shall comply with the requirements of the General Provisions as outlined in Table 8 to 40 CFR 63 Subpart ZZZZ, except per 63.6645(a)(5), the following do not apply: 63.7(b) and (c), 63.8(e), (f)(4) and (f)(6), and 63.9(b)-(e), (g) and (h).

(9VAC5-80-110, 9VAC5-60-100, 40 CFR 63Subpart ZZZZ)

- Engine/Generator Requirements Emergency RICE Limitations MACT, Subpart ZZZZ (GSE-10048337, GSE-10050838, GSE-10018416, GSE-10059089, GSE-10015352, GSE-10015903, GSE-10018464, PSE-10018737, PSE-10018735, and GSE-10025550, GSE-10002508, GSE-10006537, GSE-10003018, GSE-10003735, GSE-10004528, GSE-10004569, GSE-7000001092, and GSE-10005144) The permittee must operate the emergency stationary RICE according to the conditions in 40 CFR 63.6640(f)(1) and (2)(i) to be considered "emergency" under Subpart ZZZZ. (63.6640(f)(2)(ii) and (iii) were remanded by the Court of Appeals for the District of Columbia Circuit in May 2015.) Any operation other than emergency operation and maintenance and testing, as described in 63.6640(f)(1) and (2)(i) is prohibited. If the engine is not operated according to the requirements in paragraphs (f)(1) and (2)(i) of 40 CFR 63.6640, the engine will not be considered an emergency engine under 40 CFR 63, Subpart ZZZZ and must meet all requirements for non-emergency engines. (9VAC5-80-110, 9VAC5-60-100, 40 CFR 63 Subpart ZZZZ)
- 64. Engine/Generator Requirements Limitations Emissions Limits (GSE-10002521, GSE-1002504, GSE-10002709, GSE-10003942, GSE-10006964, GSE-10004013, GSE-10004043, GSE-10004745, GSE-10005070, GSE-10008532, GSE-10008534, GSE-10008530, GSE-10008531, GSE-10008536, GSE-10008537, and GSE-10008478) Emissions from the operation of the stationary diesel emergency generators less than 500 hp installed before 6/12/2006 shall not exceed the emissions limitations for HAP outlined in Table 2c of 40 CFR 63 Subpart ZZZZ. (9VAC5-80-110 and 40 CFR 63.6602 (Subpart ZZZZ))
- 65. Engine/Generator Requirements— Limitations Emissions Limits (GSE-10040217, GSE-10040218, GSE-10040219, GSE-10040220, GSE-10048336, GSE-10056461, GSE-10022299, GSE-10018416, GSE-10017399, GSE-10018465, PSF-10017424, GSE-10018413, GSE-10018412, GSE-10022299, PSF-10022335, GSE-10028237, PSF-10028208) HAP Emissions from the operation of the stationary diesel

emergency generators less than or equal to 500 hp installed after 6/12/2006, shall meet the requirements of 40 CFR 63 Subpart ZZZZ by meeting the requirements of 40 CFR Subpart IIII. (9VAC5-80-110 and 40 CFR 63.6590(c)(6)(Subpart ZZZZ))

Monitoring

- 66. Engine/Generator Requirements Monitoring Fuel Certification (GSE-10025550 and GSE-10025551) The permittee shall obtain a certification from the fuel supplier with each shipment of distillate oil. Each fuel supplier certification shall include the following:
 - a. The name of the fuel supplier.
 - b. The date on which the distillate oil was received.
 - c. The quantity of distillate oil delivered in the shipment.
 - d. A statement that the distillate oil complies with the American Society for Testing and Materials specifications (ASTM D396) for numbers 1 or 2 fuel oil.
 - e. The sulfur content of the distillate oil.

Fuel sampling and analysis, independent of that used for certification, as may be periodically required or conducted by DEQ may be used to determine compliance with the fuel specifications stipulated in Condition 45. Exceedance of these specifications may be considered credible evidence of the exceedance of emission limits.

(9VAC5-80-110 and Condition 6 of the 11/21/11 NSR Permit)

- 67. **Engine/Generator Requirements Fuel Certification (GSE-M290) -** The permittee shall obtain a certification from the fuel supplier with each shipment of diesel fuel. Each fuel supplier certification shall include the following:
 - a. The name of the fuel supplier.
 - b. The date on which the diesel fuel was received.
 - c. The quantity of diesel fuel delivered in the shipment.
 - d. A statement that the diesel fuel complies with the American Society for Testing and Materials specifications (ASTM D975) for S15 diesel fuel oil; and
 - e. The sulfur content of the distillate oil.

Fuel sampling and analysis, independent of that used for certification, as may be periodically required or conducted by DEQ may be used to determine compliance with the fuel specifications stipulated in Condition 46. Exceedance of these specifications may be considered credible evidence of the exceedance of emission limits.

(9VAC5-80-110 and Condition 8 of the 8/7/18 NSR Permit)

- 68. Engine/Generator Requirements Monitoring Visible Emissions Observations/Evaluations (GSE-10025550 and GSE-10025551) The permittee shall observe each emergency generator exhaust for visible emissions for at least six minutes once per month during daylight hours of operation. If visible emissions are noted, corrective action shall be taken to eliminate the visible emissions. If visible emissions continue after corrective action, a visible emissions evaluation (VEE) shall be immediately conducted on the generator for at least six minutes in accordance with Method 9 (40 CFR 60, Appendix A). If the VEE opacity average for the generator exceeds ten percent (10%), the VEE shall continue for one hour from initiation to determine compliance with the opacity limits. Results of observations and/or VEEs shall be recorded in an operation log. Records of observations shall include the following:
 - a. The name of the observer.
 - b. Date and time of the observation.
 - c. An indication that the process was operating.
 - d. An indication of the presence or absence of visible emissions.
 - e. Any corrective action taken to eliminate visible emissions, including the date and time the process was shut down and/or repairs were completed.

If a VEE is conducted, records shall be in accordance with Method 9 (40 CFR 60, Appendix A). (9VAC5-80-110)

Recordkeeping

- 69. **Engine/Generator Requirements Recordkeeping** (GSE-10025550, GSE-10025551, and GSE-M290) The permittee shall maintain records of emission data and operating parameters as necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the DEQ Tidewater Regional Office. These records shall include, but are not limited to:
 - a. Annual hours of operation of each emergency generator (Unit Ref. Nos. GSE-10025550, GSE-10025551, and GSE-M290), calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
 - b. All fuel supplier certifications (GSE-10025550, GSE-10025551, and GSE-M290).

- c. All visible emissions evaluations (GSE-10025550, GSE-10025551, and GSE-M290).
- d. Engine information including make, model, serial number, model year, maximum engine power (bhp), and engine displacement for each engine-generator set (GSM-M290).
- e. The manufacturer's written operating instructions or procedures developed by the owner/operator that are approved by the engine manufacturer for each engine-generator set (GSM-M290).
- f. Records of the reasons for operation for the rental engine-generator set, including, but not limited to, the date, cause of operation or cause of the emergency, and the hours of operation (GSM-M290).
- g. Scheduled and unscheduled maintenance and operator training (GSM-M290).

These records shall be available for inspection by the DEQ and shall be current for the most recent five years.

(9VAC5-80-110, Condition 9 of the 11/21/11 NSR Permit, and Condition 12 of the 8/7/18 NSR Permit)

Testing

70. **Engine/Generator Requirements - Testing** - (GSE-M290) – The rental engine-generator set shall be installed so as to allow the emissions testing upon reasonable notice at any time, using appropriate methods. Sampling ports shall be provided when requested at the appropriate locations and safe sampling platforms and access shall be provided.

(9VAC5-80-110 and Condition 11 of the 8/7/18 NSR Permit)

VI. Foundry Operations Requirements

Limitations

71. **Foundry Operations Requirements** – **Limitations** - **Throughput** - (550-EF5) – The foundry shakeout operation shall process no more than 50,000 tons of melted metal per year, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.

(9VAC5-80-110, 9VAC 5-50-260, and Condition 4 of the 8/1/17 NSR Permit)

72. **Foundry Operations Requirements – Limitations – Emission Controls - (550-EF5-SD)** – The foundry shakeout operations side draft ventilation system dust collector shall be equipped with a differential pressure gauge to continuously measure the differential pressure drop across the dust collector filter. The differential pressure gauge shall be installed, maintained, calibrated and operated in accordance with approved procedures which shall include, as a minimum, the manufacturer's written requirements or recommendations. The differential pressure gauge shall be provided with adequate access for inspection and shall be in operation when the foundry shakeout operations side draft ventilation system is operating.

Page 44 of 103

(9VAC5-80-110, 9VAC 5-50-260, and Condition 2 of the 8/1/17 NSR Permit)

73. **Foundry Operations Requirements** – **Limitations** - **Emissions Limit** - (550-EF5-SD) – Process Emission Limits – Emissions from the operation of the side draft ventilation system shall not exceed the limits specified below:

Particulate Matter (PM)	0.54 lb/hr	0.80 tons/year
PM_{10}	0.38 lb/hr	0.56 tons/year
PM_{10}	0.23 lb/hr	0.34 tons/year

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits may be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Conditions 71, 72, 75, and 110 of this permit.

(9VAC5-80-110, 9VAC5-50-260, and Condition 5 of the 8/1/17 NSR Permit)

- 74. **Foundry Operations Requirements Limitations Visible Emissions (550-EF5-SD)** Visible emissions from the foundry shakeout operations side draft ventilation system shall not exceed 5 percent (5%) opacity as determined by EPA Method 9. (9VAC5-80-110, 9VAC5-50-260, and Condition 6 of the 8/1/17 NSR Permit)
- 75. **Foundry Operations Requirements Limitations Emission Controls (550-EF5-SD)** Particulate Matter (PM), PM₁₀, and PM_{2.5} emissions from the foundry shakeout operations side draft ventilation system shall be controlled by a dust collector (Pollution Control Device (PCD) ID 555-C11). The dust collector shall be provided with adequate access for inspection and shall be in operation when the foundry shakeout operations side draft ventilation system is operating. (9VAC5-80-110, 9VAC5-50-260, and Condition 1 of the 8/1/17 NSR Permit)
- 76. **Foundry Operations Requirements Limitations Emission Controls (550-E1) -** Particulate emissions from the Argon/Oxygen Degassing (AOD) Furnace shall be controlled by a cartridge filter system (PCD ID No. 550-C1a/550-C1b). The cartridge filter system shall be provided with adequate access for inspection and shall be in operation when the AOD Furnace is operating. (9VAC5-80-110 and Condition 3 of the 10/17/14 NSR Permit)
- 77. **Foundry Operations Requirements Limitations Emission Controls (555-E11) -** Particulate emissions from the Sand Reclaim operation shall be controlled by a fabric filter (PCD ID No. 555-C11). The fabric filter shall be provided with adequate access for inspection and shall be in operation when the Sand Reclaim Operation is operating.
 - (9VAC5-80-110 and Condition 4 of the 10/17/14 NSR Permit)
- 78. **Foundry Operations Requirements - Limitations Emission Control (550-E3 and 550-E4) -**Particulate emissions from the Electric Arc Furnaces shall be controlled by a cartridge filter system (PCD ID No. 550-C1a/550-C1b). The cartridge filter system shall be provided with adequate access for inspection and shall be in operation when the Electric Arc Furnaces are operating.

Page 45 of 103

(9VAC5-80-110, 40 CFR 63.7690(c) (Subpart EEEEE), and Condition 4 of the 3/17/11 NSR Permit)

79. **Foundry Operations Requirements - Limitations - Throughput - (550-E1) -** The throughput of metal to the Argon/Oxygen Degassing (AOD) Furnace shall not exceed 10,000 tons per year, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.

(9VAC5-80-110 and Condition 10 of the 10/17/14 NSR Permit)

80. **Foundry Operations Requirements - Limitations - Throughput - (555-E11) -** The throughput of sand to the Sand Reclaim Operation shall not exceed 40,000 tons per year, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.

(9VAC5-80-110 and Condition 11 of the 10/17/14 NSR Permit)

81. **Foundry Operations Requirements - Limitations – Emissions Limits - (550-E1) -** Emissions from the operation of the Argon/Oxygen Degassing (AOD) Furnace shall not exceed the limits specified below:

Nitrogen Oxides (as NO₂)

5.0 lbs/hour

1.0 tons/year

These emissions are derived from the estimated overall emissions contribution from the operating limits. Exceedance of the operating limits may be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Conditions 76 and 79 of this permit.

(9VAC5-80-110 and Condition 12 of the 10/17/14 NSR Permit)

82. **Foundry Operations Requirements - Limitations – Visible Emissions Limit – (550-E1) - Visible** emissions from the Argon/Oxygen Degassing (AOD) Furnace shall not exceed 20 percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 30 percent (30%) as determined by EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown, and malfunction. (9VAC5-80-110 and Condition 14 of the 10/17/14 NSR Permit)

83. **Foundry Operations Requirements - Limitations – Emissions Limits - (555-E11) - Emissions from the operation of the Sand Reclaim Operation shall not exceed the limits specified below:**

Particulate Matter (PM)

2.3 lbs/hour

3.6 tons/year

These emissions are derived from the estimated overall emissions contribution from operating limits. Exceedance of the operating limits may be considered credible evidence of the exceedance of emissions limits. Compliance with these emissions limits may be determined as stated in Conditions 77 and 80 of this permit.

(9VAC5-80-110 and Condition 13 of the 10/17/14 NSR Permit)

Page 46 of 103

84. **Foundry Operations Requirements - Limitations – Visible Emissions Limit** – (555-E11) - Visible emissions from the Sand Reclaim Operation shall not exceed 20 percent opacity except during one sixminute period in any one hour in which visible emissions shall not exceed 60 percent (60%) as determined by EPA Method 9 (reference 40 CFR 60, Appendix A). (9VAC5-80-110 and Condition 15 of the 10/17/14 NSR Permit)

- 85. **Foundry Operations Requirements Limitations Visible Emissions Limit (FDFS-E1) Visible** emissions from the Foundry Dry Feed System shall not exceed 20 percent opacity except during one sixminute period in any one hour in which visible emissions shall not exceed 30 percent (30%) as determined by EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown, and malfunction. (9VAC5-80-110 and 9 VAC5-50-80)
- 86. **Foundry Operations Requirements Limitations Emissions Limit (550-E4) -** Emissions from the operation of Electric Arc Furnace C shall not exceed the limits specified below:

Particulate Matter (PM) 0.8 lbs/hour 3.4 tons/year PM₁₀ 0.8 lbs/hour 3.4 tons/year

These emissions are derived from the estimated overall emissions contribution from the operating limits. Exceedance of the operating limits may be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Condition 78 of this permit. (9VAC5-80-110 and Condition 10 of the 3/17/11 NSR Permit)

87. **Foundry Operations Requirements - Limitations – Emissions Limit – (550-E3 and 550-E4) - Emissions from the operation of Electric Arc Furnaces B and C shall not exceed the limits specified below:**

Particulate Matter (PM) 0.005 grains/dscf

(9VAC5-80-110, 40 CFR 63.7690(a)(1) (Subpart EEEEE))

- 88. **Foundry Operations Requirements Limitations Visible Emissions Limit (550-E3 and 550-E4) -** Visible emissions from the cartridge filter system exhaust (Stack ID No. 550-S1) shall not exceed 5 percent (5%) opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown, and malfunction. (9VAC5-80-110, 9VAC5-50-260, and Condition 12 of the 3/17/11 NSR Permit)
- 89. **Foundry Operations Requirements Limitations Visible Emissions Limit (550-EF1 and 550-EF2) -**Fugitive emissions from the building 550 that houses units that do not emit through a conveyance (Unit Ref. Nos. 550-EF1 and 550-EF2) shall not exhibit opacity greater than 20 percent (six-minute average), except for one six-minute average per hour that does not exceed 27% opacity, as determined by EPA Method 9 (reference 50 CFR 60, Appendix A).

 (9VAC5-80-110 and 40 CFR 63.7690 (a)(7) (Subpart EEEEE))

Page 47 of 103

90. Foundry Operations Requirements - Limitations – Emissions Limit – (550-E12 and 555-EF3) -

Emissions from the operation of the riser burn areas (Unit Ref. Nos. 550-E12 and 555-EF3) shall not exceed the limits specified below:

Particulate Matter (PM)

3.05 lbs/hour

(9VAC5-80-110 and 9VAC5-40-2410)

- 91. **Foundry Operations Requirements Limitations Visible Emissions Limit (550-E12 and 555-EF3) -** Visible emissions from the riser burn areas (Unit Ref. No. 550-E12 and 555-EF3) shall not exceed 20 percent opacity except during one six-minute period in each hour in which visible emissions shall not exceed 60 percent (60%), as determined by EPA Method 9 (reference 40 CFR 60, Appendix A). (9VAC5-80-110 and 9VAC5-40-2430 referencing 9VAC5-40-60 et seq.)
- 92. **Foundry Operations Requirements Limitations Emissions Limit (550-E20) -** Emissions from the operation of the steel shot abrasive blasting unit (Unit Ref. No. 550-E20) shall not exceed the limits specified below:

Particulate Matter (PM)

18.70 lbs/hour

(9VAC5-80-110 and 9VAC5-40-2410)

- 93. **Foundry Operations Requirements Limitations Visible Emissions Limit (550-E20) -** Visible emissions from the steel shot abrasive blasting units (Unit Ref. No. 550-E20) shall not exceed 20 percent opacity except during one six-minute period in each hour in which visible emissions shall not exceed 60 percent (60%), as determined by EPA Method 9 (reference 40 CFR 60, Appendix A). (9VAC5-80-110 and 9VAC5-40-2430 referencing 9VAC5-40-60 et seq.)
- 94. **Foundry Operations Requirements Limitations Emissions Limit (550-E21) -** Emissions from the sawing operation (Unit Ref. No. 550-E21) shall not exceed the limits specified below:

Particulate Matter (PM)

3.05 lbs/hour

(9VAC5-80-110 and 9VAC5-40-2410)

95. **Foundry Operations Requirements - Limitations** – **Visible Emissions Limit** – **(550-E21) -** Visible emissions from the steel shot abrasive blasting units (Unit Ref. No. 550-E21) shall not exceed 20 percent opacity except during one six-minute period in each hour in which visible emissions shall not exceed 60 percent (60%), as determined by EPA Method 9 (reference 40 CFR 60, Appendix A). (9VAC5-80-110 and 9VAC5-40-2430 referencing 9VAC5-40-60 et seq.)

Monitoring

96. **Foundry Operations Requirements - Monitoring – Monitoring Device - (555-C11)** – To ensure good performance, the differential pressure gauge used to continuously measure the differential pressure drop across the dust collector filter shall be observed by the permittee with a frequency of not less than per day,

Page 48 of 103

for days on which the foundry shakeout operations side draft ventilation system (550-EF5-SD) is operating. The permittee shall keep a log of the observations from the differential pressure gauge. (9VAC5-80-110 and Condition 3 of the 8/1/17 NSR Permit)

- 97. **Foundry Operations Requirements Monitoring Monitoring Device (550-C1a/550-C1b) -** The cartridge filter system (PCD ID No. 550-C1a/550-C1b) shall be equipped with a device to continuously measure the differential pressure drop across the filters. The monitoring device shall be installed, maintained, calibrated, and operated in accordance with approved procedures which shall include, as a minimum, the manufacturer's written requirements or recommendations. The monitoring device shall be provided with adequate access for inspection and shall be in operation when the cartridge filter system is operating. (9VAC5-80-110, 40 CFR 63 Subpart EEEEE, Condition 5 of the 10/17/14 NSR Permit, and Condition 5 of the 3/17/11 NSR Permit)
- 98. **Foundry Operations Requirements Monitoring Monitoring Device Observation (550-C1a/550-C1b) -** To ensure good performance, the monitoring device used to continuously measure the differential pressure drop across the cartridge filter system (PCD ID No. 550-C1a/550-C1b) shall be observed by the permittee with a frequency of not less than once per operating day. The permittee shall continuously record measurements from the monitoring device. The permittee shall keep a log of the monitoring device measurements. The log shall include the date and time the measurement was made, an indication that the process was operating, the acceptable pressure drop range, the measured pressure drop, and a description of the corrective actions taken whenever a pressure drop outside the acceptable range was observed, including the date and time repairs were completed.

(9VAC5-80-110, Condition 6 of the 10/17/14 NSR Permit, and Condition 6 of the 3/17/11 NSR Permit)

- 99. **Foundry Operations Requirements Monitoring Monitoring Device (550-C1a/550-C1b) -** The cartridge filter system (PCD ID No. 550-C1a/550-C1b) shall be equipped with a cartridge leak detection system. The monitoring device shall be installed, maintained, calibrated and operated in accordance with approved procedures which shall include, as a minimum, the manufacturer's written requirements or recommendations. The monitoring device shall be provided with adequate access for inspection and shall be in operation when the cartridge filter system is operating.

 (9VAC5-80-110, 40 CFR 64.2, 40 CFR 63 Subpart EEEEE, Condition 7 of the 3/17/11 NSR Permit, and Condition 7 of the 10/17/14 NSR Permit)
- 100. **Foundry Operations Requirements Monitoring Monitoring Devices (555-C11) -** The fabric filter (PCD ID No. 555-C11) for the Sand Reclaim Operation (Unit Ref. No. 555-E11) shall be equipped with a device to continuously measure the differential pressure drop across the filter. The device shall be installed, maintained, calibrated, and operated in accordance with approved procedures which shall include, as a minimum, the manufacturer's written requirements or recommendations. The monitoring device shall be provided with adequate access for inspection and shall be in operation when the fabric filter is operating. (9VAC5-80-110 and Condition 8 of the 10/17/14 NSR Permit)
- 101. **Foundry Operations Requirements Monitoring Monitoring Device Observation (555-C11) -** To ensure good performance, the monitoring device used to continuously measure the differential pressure drop across the fabric filter (PCD ID No. 555-C11) for the Sand Reclaim Operation (Unit Ref. No. 555-E11) shall be observed by the permittee with a frequency of not less than once per operating day while reclaiming sand. The permittee shall keep a log of the observations from the monitoring device, including the name of the

observer, the date and time of the observation, the observed pressure drop reading, the acceptable pressure drop range, and any corrective action taken when the pressure drop reading is outside the acceptable range (including, but not limited to, a brief description and date of completion of corrective action). (9VAC5-80-110 and Condition 9 of the 10/17/14 NSR Permit)

Foundry Operations Requirements - Monitoring - Visible Emissions Evaluations - (550-S1) - The permittee shall perform a visible emissions evaluation on the stack of the Argon/Oxygen Degassing (AOD) Furnace and Foundry Dry Feed System (Stack No. 550-S1) once every six months during daylight hours of operation utilizing EPA Method 9 (reference 40 CFR 60, Appendix A). The permittee shall keep records in accordance with EPA Method 9 and maintain the records at the facility for inspection by DEQ for the most recent 5-year period.

(9VAC5-80-110 E and Condition 16 of the 10/17/14 NSR Permit)

- Foundry Operations Requirements Monitoring Visible Emissions Observations/Evaluations (550-S20) The permittee shall observe the stack of the Steel Shot Abrasive Blasting Operation (Stack No. 550-S20) at least once per month during daylight hours of operations for visible emissions for at least six minutes. If visible emissions are noted from the stack, operational adjustment or maintenance shall be performed to eliminate the visible emissions. If visible emissions continue after maintenance actions, a visible emissions evaluation (VEE) shall be immediately conducted on the stack for at least six minutes in accordance with Method 9 (40 CFR 60, Appendix A). If the VEE opacity average for the stack exceeds ten percent (10%), the VEE shall continue for one hour from initiation to determine compliance with the opacity limit. Results of observations and/or VEEs shall be recorded in an operation log. Records of observations shall include the following:
 - a. The name of the observer,
 - b. Date and time of the observation,
 - c. An indication that the process was operating,
 - d. An indication of the presence or absence of visible emissions, and
 - e. Any corrective action taken to eliminate visible emissions, including the date and time the process was shut down and/or repairs were made.

If a VEE is conducted, records shall be in accordance with Method 9 (40 CFR 60, Appendix A). (9VAC5-80-110)

- 104. **Foundry Operations Requirements - Requirements by Reference MACT, Subpart EEEEE (550-E3, 550-E4, 550-EF1, and 550-EF2) Monitoring** Except where this permit is more restrictive than the applicable requirement, the Foundry Operation shall be operated in compliance with the requirements of 40 CFR 63 Subpart EEEEE.
 - (9VAC5-80-110 and Condition 9 of the 3/17/11 NSR Permit)
- 105. **Foundry Operations Requirements Monitoring Work Practice Standards MACT, Subpart EEEEE (550-E3, 550-E4, 550-EF1, and 550-EF2) -** The permittee must prepare and operate at all times according to a written certification that the foundry purchases and uses only metal ingots, pig iron, slitter, or

other materials that do not include post-consumer automotive body scrap, post-consumer engine blocks, post-consumer oil filters, oily turnings, lead components, mercury switches, plastics, or free organic liquids. (9VAC5-80-110 and 40 CFR 63.7700(b) (Subpart EEEEE))

- 106. **Foundry Operations Requirements Monitoring Operations and Maintenance Requirements - MACT, Subpart EEEEE (550-E3 and 550-E4) -** The permittee must prepare and operate at all times according to a written operation and maintenance plan (O&M Plan) for each capture and collection system and control device for the Electric Arc Furnaces (Unit Ref. Nos. 550-E3 and 550-E4) that are subject to the emission limit in 40 CFR 63.7690(a). Your O&M Plan is subject to approval by the DEQ Tidewater Regional Office, and must contain elements described in 40 CFR 63.7710 (b)(1) through (6). Applicable requirements are including, but not limited to, the following:
 - a. Monthly inspections of the equipment that is important to the performance of the total capture system (i.e., pressure sensors, dampers, and damper switches) (40 CFR 63.7710 (b)(1)).
 - b. Preventive maintenance plan for each control device, including a preventive maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance (40 CFR 63.7710 (b)(3)).
 - c. A site specific monitoring plan for each bag leak detection system (40 CFR 63.7710(b)(4)).
 - d. Corrective action plan for the cartridge filter system (40 CFR 63.7710(b)(5)).
 - e. Procedures for providing an ignition source to mold vents of sand mold systems in each pouring area and pouring station unless it has been determined that the mold vent gases either are not ignitable, ignite automatically, or cannot be ignited due to accessibility or safety issues. This determination must be documented and records are maintained (40 CFR 63 7710(b)(6)).

(9VAC5-80-110 and 40 CFR 63.7710(b) (Subpart EEEEE))

- Foundry Operations Requirements Monitoring Startup, Shutdown, and Malfunction Plan MACT, Subpart EEEEE (550-E3 and 550-E4) The permittee must develop a written startup, shutdown, and malfunction plan for the electric arc furnaces (Unit Ref. Nos. 550-E3 and 550-E4) according to the provisions in 40 CFR 63.6 (e)(3). (9VAC5-80-110 and 40 CFR 63.7720(c) (Subpart EEEEE))
- Foundry Operations Requirements Monitoring Continuing Monitoring Requirements MACT, Subpart EEEEE (550-C1a/550-C1b) For the cartridge filter system, the permittee must at all times monitor the relative change in PM loading using a bag leak detection system according to the requirements in 40 CFR 63.7741(b) and conduct inspections at their specified frequencies according to the requirements specified in 40 CFR 63.7740(c)(1) through (8), as applicable.

 (9VAC5-80-110 and 40 CFR 63.7740(c) (Subpart EEEEE))
- 109. **Foundry Operations Requirements -- Monitoring Monitoring Device Requirements MACT, Subpart EEEEE (550-C1a/550-C1b)** The cartridge filter system shall be equipped with a bag leak

detection system that must be installed, operated, and maintained according to the requirements in 40 CFR Subpart EEEEE, including, but not limited to, the following:

- a. The system must be certified by the manufacturer to be capable of detecting PM emissions at concentrations of 0.0044 grains per actual cubic foot or less.
- b. The bag leak detection system sensor must provide output of relative particulate matter loadings and continuously record the output with a data logger.
- c. A written operation and maintenance (O&M) plan must be prepared for the bag leak detection system pursuant to 40 CFR 63.7710(b).
- d. The system must be equipped with an alarm that will sound when an increase in relative particulate loading is detected over the alarm set point established in the O&M Plan; the alarm must be located such that it can be heard by the appropriate plant personnel.
- e. The initial adjustment of the system must, at minimum, consist of establishing the baseline output by adjusting the sensitivity (range) and the averaging period of the device, and establishing the alarm set points and the alarm delay time (if applicable).
- f. Following the initial adjustment, the sensitivity or range, averaging period, alarm set point, or alarm delay time should not be adjusted without the approval of the DEQ Tidewater Regional Office. Except, once per quarter, the sensitivity of the cartridge leak detection system may be adjusted to account for seasonal effects including temperature and humidity according to the procedures in the O&M Plan required by 40 CFR 63.7710(b).
- g. The bag leak detector sensor shall be installed downstream of the cartridge filter.
- h. Where multiple detectors are required, the system's instrumentation and alarm may be shared among detectors.

(9VAC5-80-110, 40 CFR 63.7710(b), and 40 CFR 63.7741(b)) (Subpart EEEEE))

Recordkeeping

- Foundry Operations Requirements Recordkeeping (550-E1, 550-E3, 550-E4, 550-EF1, 550-EF2, 550-EF3, 550-EF5, 550-EF5-SD, and 555-E11 and PCD ID No. 550-C1a / 550-C1b) The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the DEQ Tidewater Regional Office. These records shall include, but are not limited to:
 - a. Annual throughput of metal processed by the foundry shakeout operation (**550-EF5**) (in tons), calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.

- b. Operation and control device monitoring records for the dust collector (**550-EF5-SD**) as required in Condition 96 of this permit.
- c. Annual throughput of metal to the Argon/Oxygen Degassing (AOD) Furnace (**550-E1**), calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
- d. Annual throughput of sand to the Sand Reclaim Operation (555-E11), calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
- e. Operation and control device monitoring records for the cartridge filter system (**PCD ID No. 550-C1a and 550-C1b**) and the fabric filter for the Sand Reclaim Operation (**PCD ID No. 555-C11**), as required by Conditions 98 and 101.
- f. For the stack of the Argon/Oxygen Degassing (AOD) Furnace and Foundry Dry Feed System (Stack No. 550-S1), visible emission evaluation records in accordance with Method 9 (40 CFR 60 Appendix A).
- g. For the stack of the Steel Shot Abrasive Blasting Operation (**Stack No. 550-S20**), visible emission observations, and if VEE is performed, records in accordance with Method 9 (40 CFR 60 Appendix A).
- h. Copies of all required notifications.
- i. Copies of all required reports.
- j. All required opacity and PM performance test results.
- k. Records specified in 40 CFR 63.6(e)(3)(iii) through (v) related to startup, shutdown, and malfunction.
- 1. Records of the times the cartridge leak detection system (**PCD ID No. 550-C1a and 550-C1b**) alarm sounded, and for each valid alarm, the time you initiated corrective action, the corrective action taken, and the date on which corrective action was completed (40 CFR 63.7743(c)(2)).
- m. Records of all inspections and maintenance of the cartridge filter system (**PCD ID No. 550-C1a** and **550-C1b**) as required by 40 CFR 63.7740(c), including all information needed to document conformance with these requirements (40 CFR 63.7743(c)(1)).
- n. Records that document continuous compliance with the work practice standards in 40 CFR 63.7700(b) (40 CFR 63.7744(a)).

- o. Records of monthly inspections, preventive maintenance, site-specific cartridge leak detection system (**PCD ID No. 550-C1a and 550-C1b**) monitoring, and corrective action to document conformance with the requirements of the O&M Plan (40 CFR 63.7745(a)).
- p. A current copy of the O&M Plan shall be available for inspection upon request. The plans must be kept for the life of the foundry or until the foundry is no longer subject to the requirements of 40 CFR 63 Subpart EEEEE (40 CFR 63.7745(b)).

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years unless otherwise noted.

(9VAC5-80-110, Condition 13 of the 3/17/11 NSR Permit, Condition 17 of the 10/17/14 NSR Permit, Condition 7 of the 8/1/17 NSR Permit and 40 CFR 63.7752 (Subpart EEEEE))

Testing

- 111. **Foundry Operations Requirements Testing -** (550-EF5-SD and PCD ID No. 555-C11) The foundry shakeout operations side draft ventilation system and associated dust collector shall be constructed and installed so as to allow for emissions testing upon reasonable notice at any time, using appropriate methods. This includes constructing the facility / equipment such that volumetric flow rates and pollutant emission rates can be accurately determined by applicable test methods and providing a stack or duct that is free from cyclonic flow. Sampling ports shall be provided when requested at the appropriate locations and safe sampling platforms and access shall be provided.

 (9VAC5080-110, 9VAC5-50-50, and Condition 8 of the 8/1/17 NSR Permit)
- 112. **Foundry Operations Requirements Testing MACT, Subpart EEEEE (550-E3 and 550-E4) -** The permittee must conduct subsequent performance tests to demonstrate compliance with the applicable PM emission limit in 40 CFR 63.7690(a)(1) for the electric arc furnaces no less frequently than every 5 years. (9VAC5-80-110 and 40 CFR 63.7731(a) (Subpart EEEEE))
- Foundry Operations Requirements Testing MACT, Subpart EEEEE (550-EF1, 550-EF2, and 550-EF5) The permittee must conduct subsequent performance tests to demonstrate compliance with the applicable fugitive emission opacity limits in 40 CFR 63.7690(a)(7) no less frequently than once every 6 months (a subsequent performance test is considered timely if conducted anytime within the sixth calendar month following the month the previous test was conducted).

 (9VAC5-80-110 and 40 CFR 63.7731(b) (Subpart EEEEE))
- Foundry Operations Requirements Testing MACT, Subpart EEEEE (550-E3 and 550-E4) To determine compliance with the applicable PM emission limit in 40 CFR 63.7690(a)(1) for the electric arc furnaces, the test methods and procedures in 40 CFR 63.7732(b) shall be followed. (9VAC5-80-110 and 40 CFR 63.7732(b) (Subpart EEEEE))
- Foundry Operations Requirements Testing MACT, Subpart EEEEE (550-EF1, 550-EF2, and 550-EF5) To determine compliance with the opacity limit in 40 CFR 63.7690(a)(7) for fugitive emissions from buildings or structures housing any emission units of the foundry operation, EPA Method 9 (reference 40)

Page 54 of 103

CFR 60 Appendix A) shall be conducted by a certified observer, and concurrently with the PM performance tests, as required by 40 CFR 63.7732(d).

(9VAC5-80-110 and 40 CFR 63.7732(d) (Subpart EEEEE))

- 116. **Foundry Operations Requirements Testing** The permitted facility shall be constructed so as to allow for emissions testing at any time using appropriate methods. Upon request from DEQ, test ports shall be provided at the appropriate locations. (9VAC5-40-30, 9VAC5-50-30, and 9VAC5-80-110)
- 117. **Foundry Operations Requirements Testing** If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the appropriate method(s) in accordance with procedures approved by the DEO.

(9VAC5-80-110)

Notifications and Reporting

- 118. **Foundry Operations Requirements Notifications and Reporting (No. 550-EF5-SD)** The permittee shall furnish written notification to the DEQ Tidewater Regional Office of:
 - a. The anticipated start-up date of the foundry shakeout operations side draft ventilation system postmarked not more than 60 days nor less than 30 days prior to such date.
 - b. The actual start-up date of the foundry shakeout operations side draft ventilation system within 15 days after such date.

(9VAC5-80-110 and Condition 9 of the 8/1/17 NSR Permit)

- Foundry Operations Requirements Notifications and Reporting MACT, Subpart EEEEE (550-E3, 550-E4, 550-EF1, and 550-EF2, and 550-EF5) The permittee shall furnish written notification to the DEQ Tidewater Regional Office:
 - a. All notifications required by 40 CFR 63.6(h)(4) and (5), 63.7(b) and (c), 63.8(e), 63.8(f)(4) and (6), 63.9(b) through (h), as applicable, by the specified dates.
 - b. The anticipated date of performance tests post-marked at least 60 calendar days prior to such date (40 CFR 63.7750(d)).
 - c. Notification of compliance status post-marked no later than 30 calendar days following each compliance demonstration that does not require a performance test (40 CFR 63. 63.7750(e)(1).
 - d. Notification of compliance status post-marked no later than 60 calendar days following each compliance demonstration that requires a performance test (40 CFR 63. 63.7750(e)(2)).

(9VAC5-80-110 and 40 CFR 63.7750 (Subpart EEEEE))

Page 55 of 103

Foundry Operations Requirements - Notifications and Reporting - MACT, Subpart EEEEE - (550-E3, 550-E4, 550-EF1, 550-EF2, and 550-EF5) - The permittee shall submit semiannual compliance reports to the DEQ Tidewater Regional Office, postmarked no later than January 31 or July 31, covering reporting periods from July 1 through December 31, and January 1 through June 30, respectively. The reports shall include the information specified in 40 CFR 63.7751(b). All deviations reported in the MACT EEEEE semiannual compliance reports shall also be addressed in the Title V semiannual monitoring reports required by General Condition XVIII.235 of this permit, along with all other deviations from permit requirements. (9VAC5-80-110, 40 CFR 63.7751(a) and (b), and 40 CFR 63.7751(d) (Subpart EEEEE))

Foundry Operations Requirements - Notifications and Reporting - MACT, Subpart EEEEE - (550-E3, 550-E4, 550-EF1, 550-EF2, and 550-EF5) - If a startup, shutdown, or malfunction occurs that was not consistent with the SSM Plan, the permittee must submit an immediate startup, shutdown, and malfunction report according to the requirements of 40 CFR 63.10(d)(5)(ii). (9VAC5-80-110 and 40 CFR 63.7751(c) (Subpart EEEEE))

VII. Steel Preparation and Fabrication Requirements

Limitations

122. **Steel Preparation and Fabrication Requirements - Limitations – Emissions Limits - (274-E1, 275-E5, 288-E1, 288-E2, and 288-E3) -** Emissions from the operation of the abrasive shot blasting and abrasive blasting units shall not exceed the limits specified below:

Particulate Matter (PM)

7.58 lbs/hour (each)

(9VAC5-80-110 and 9VAC5-40-260)

Steel Preparation and Fabrication Requirements - Limitations – Visible Emissions Limits – (274-E1, 275-E5, 288-E1, 288-E2, and 288-E3) - Visible emissions of the abrasive shot blasting and abrasive blasting units shall not exceed 20 percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 60 percent (60%) as determined by EPA Method 9 (reference 40 CFR 60, Appendix A).

(9VAC5-80-110 and 9VAC5-40-320 referencing 9VAC5-40-60 et seq.)

- Steel Preparation and Fabrication Requirements Limitations Visible Emissions Limits (276-E3PC) Visible emissions from the plasma cutting unit shall not exceed 20 percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 60 percent (60%) as determined by EPA Method 9 (reference 40 CFR 60, Appendix A). (9VAC5-80-110 and 9VAC5-40-320 referencing 9VAC5-40-60 et seq.)
- Steel Preparation and Fabrication Requirements Limitations (276-E6) Particulate Matter emissions from the plasma arc cutting and oxyfuel cutting processes shall be controlled by a cartridge filter. The cartridge filter shall be provided with adequate access for inspection and shall be in operation when either the plasma arc cutting or oxyfuel cutting process is operating. (9VAC5-80-110, and Condition 1 of 3/22/16 NSR Permit)

- 126. **Steel Preparation and Fabrication Requirements Limitations (276-C6) -** The cartridge filter shall be equipped with a device to continuously measure the differential pressure drop across the fabric filter. The monitoring device shall be installed, maintained, calibrated, and operated in accordance with approved procedures which shall include, as a minimum, the manufacturer's written requirements or recommendations. The monitoring device shall be provided with adequate access for inspection and shall be in operation when either the plasma arc cutter or oxyfuel cutter (276-E6) is operating. (9VAC5-80-1180 and Condition 2 of 3/22/16 NSR Permit)
- 127. **Steel Preparation and Fabrication Requirements Limitations** (276-E6) Emissions from the operation of the plasma arc cutting and oxyfuel cutting processes shall not exceed the limits specified below:

Nitrogen Oxides (NO_X)

5.96 tons/year

Exceedance of the operating limits may be considered credible evidence of the exceedance of emissions limits. Compliance with these emissions limits may be determined as stated in Conditions 125, 126, 128, and 130.

(9VAC5-80-110, 9VAC5-40-260, and Condition 4 of 3/22/16 NSR Permit)

Steel Preparation and Fabrication Requirements - Limitations – (276-E6) - Visible emissions from the plasma arc cutting or oxyfuel cutting shall not exceed 5% (5 percent) opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during malfunction. (9VAC5-80-110, and Condition 5 of 3/22/16 NSR Permit)

Monitoring

- Steel Preparation and Fabrication Requirements Monitoring Visible Emissions Evaluations (274-E1, 274-E5, 276-E3PC, 288-E1, 288-E2, and 288-E3) The permittee shall perform a visible emissions evaluation on the stack of each steel preparation and fabrication unit at least once per month during daylight hours of operation for at least eighteen minutes in accordance EPA Method 9 (reference 40 CFR 60, Appendix A). If the VEE opacity average for the stack exceeds ten percent (10%), the VEE shall continue for one hour from initiation to determine compliance with the opacity limits. The permittee shall keep records in accordance with EPA Method 9 and maintain the records at the facility for inspection by DEQ for the most recent 5-year period. (9VAC5-80-110)
- 130. Steel Preparation and Fabrication Requirements Monitoring Device Observations (276-E6) To ensure good performance, the differential pressure gauge used to continuously measure the differential pressure drop across the fabric filter, shall be observed by the permittee with a frequency of not less than once per day when either the plasma cutter or oxyfuel cutter (Unit Ref. No. 276-E6) is operating. The permittee shall establish an acceptable normal range for the differential pressure drop, based on manufacturer recommendations or good engineering judgement within 30 days of startup, and take corrective action when outside the normal range. The permittee shall keep a log of the observations from the differential pressure gauge associated with the cartridge filter. This log shall include the date, time, name of the observer, the results of the observation, and the date and time of corrective actions taken, whenever operations outside of the established range were observed.

Page 57 of 103

(9VAC5-80-1180 and Condition 3 of 3/22/16 NSR Permit)

131. **Steel Preparation and Fabrication Requirements - Monitoring - Visible Emissions Observations -** (276-E6) - The FARR® Gold Series GS-32 pulse jet filter (Unit Ref. No. 276-C6) shall be observed at least once per day for at least a one-minute time period during plasma arc cutting or oxyfuel cutting to determine if there are any visible emissions. The presence of visible emissions shall indicate the need for prompt corrective action. The permittee shall keep a log of the observations. The log shall include the name of the observer, the date and time of the observations, whether operating or not, and if operating, the presence of visible emissions or lack thereof, and the date and time of corrective actions taken whenever visible emissions were observed.

(9VAC5-80-110 and Condition 6 of 3/22/16 NSR Permit)

Recordkeeping

- Steel Preparation and Fabrication Requirements Recordkeeping (All Units) The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the DEQ Tidewater Regional Office. These records shall include, but are not limited to:
 - a. Annual throughput of abrasive blast media (in tons) and hours of operation for each of the Steel Preparation and Fabrication Operations units (Unit Ref. Nos. 274-E1 and 274-E5, 276-E3PC, 288-E1 through 288-E3). The abrasive blast media throughput (in tons) and hours of operation shall be recorded and maintained in a logbook for each calendar month such that the annual amounts can be calculated monthly as the sum of each consecutive 12-month period.
 - b. Visible emission evaluations (VEE) records in accordance with Method 9 (40 CFR 60 Appendix A).
 - c. Operation and control device monitoring records for the cartridge filter as required in Condition 130.
 - d. Visible emissions observations as required in Condition 131.

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.

(9VAC5-80-110 and Condition 7 of 3/22/16 NSR Permit)

133. **Steel Preparation and Fabrication Requirements –Recordkeeping** – (**All Units**) – The permittee shall maintain records of the occurrence and duration of any bypass, malfunction, shutdown, or failure of the facility or its associated air pollution control equipment that results in excess emissions for more than one hour. Records shall include the date, time, duration, description (emission unit, pollutant affected, cause), corrective action, preventive measures taken, and name of person generating the record. (9VAC5-80-110 and Condition 13 of 3/22/16 NSR Permit)

Huntington Ingalls Incorporated - Newport News Shipbuilding

Permit Number: TRO-60153 May 23, 2019

Page 58 of 103

Testing

Steel Preparation and Fabrication Requirements - Testing - (All Units) - If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the appropriate method(s) in accordance with procedures approved by the DEQ. (9VAC5-80-110)

Page 59 of 103

VIII. Secondary Lead Processing Requirements

Limitations

- 135. Secondary Lead Processing Requirements Limitations Emission Controls (4582-E12 and LS-E1) Particulate and lead emissions from the Secondary Lead Processing units shall be controlled by a baghouse (4582-C2 or 250-C1/250-C2 when 4582-E12 is located at Building 250). The baghouse shall be provided with adequate access for inspection and shall be in operation when the Lead Casting Operation, Lead Repair Operation, and Lead School are operating.
 - (9VAC5-80-110 and Condition 3 of the 3/17/11 NSR Permit)
- Secondary Lead Processing Requirements Limitations Throughput (4582-E12 and LS-E1) The annual throughput of lead through the Secondary Lead Processing units shall not exceed 1,500 tons per year, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.

 (9VAC5-80-110 and Condition 8 of the 3/17/11 NSR Permit)
- 137. **Secondary Lead Processing Requirements Limitations Visible Emissions (4582-E12) -** Visible emissions from the baghouse exhaust (4582-C2) shall not exceed 20 percent opacity except during one sixminute period in any one hour in which visible emissions shall not exceed 30 percent (30%) as determined by EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown, and malfunction.

 (9VAC5-80-110, 9VAC5-50-80, and Condition 11 of the 3/17/11 NSR Permit)
- 138. **Secondary Lead Processing Requirements Limitations Visible Emissions (LS-E1)** Visible emissions from the baghouse exhaust shall not exceed 20 percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 30 percent (30%) as determined by EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown, and malfunction.

(9VAC5-80-110, 9VAC5-50-80, and Condition 11 of the 3/17/11 NSR Permit)

Monitoring

Secondary Lead Processing Requirements - Monitoring - Visible Emissions Observations/Evaluations - (4582-C2 and 250-C1/250-C2 systems) - The permittee shall observe the baghouse exhaust systems (4582-C2 and 250-C1/250-C2 when 4582-E12 is located at Building 250) at least once per week (Monday through Sunday) during daylight hours of operation for visible emissions for at least six minutes. If visible emissions are noted from the stack, operational adjustment or maintenance shall be performed to eliminate the visible emissions. If visible emissions continue after maintenance actions, a visible emissions evaluation (VEE) shall be immediately conducted on the stack for at least six minutes in accordance with Method 9 (40 CFR 60, Appendix A). If the VEE opacity average for the stack exceeds ten percent (10%), the VEE shall continue for one hour from initiation to determine compliance with the opacity limit. Results of observations and/or VEEs shall be recorded in an operation log. Records of observations shall include the following:

Page 60 of 103

- a. The name of the observer.
- b. Date and time of the observation.
- c. An indication that the process was operating.
- d. An indication of the presence or absence of visible emissions.
- e. Any corrective action taken to eliminate visible emissions, including the date and time the process was shut down and/or repairs were completed.

If a VEE is conducted, records shall be in accordance with Method 9 (40 CFR 60, Appendix A). (9VAC5-80-110)

Recordkeeping

- Secondary Lead Processing Requirements Recordkeeping (All Units) The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the DEQ Tidewater Regional Office. These records shall include, but are not limited to:
 - a. Annual throughput of lead (in tons) for the Secondary Lead Processing units (Unit Ref. Nos. 4582-E12 and LS-E1), calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
 - b. Weekly visible emissions observations, visible emissions evaluations (if performed), and any corrective action taken.

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.

(9VAC5-80-110 and Condition 13 of the 3/17/11 NSR Permit)

Testing

Secondary Lead Processing Requirements - Testing - (All Units) - If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the appropriate method(s) in accordance with procedures approved by the DEQ.

(9VAC5-80-110)

Page 61 of 103

IX. Woodworking Requirements

Limitations

142. **Woodworking Requirements - Limitations – Emissions Limits - (3-E1) -** Emissions from the operation of the cutting/planer/re-saw shall not exceed the limits specified below:

Particulate Matter (PM)

0.5 grains per standard cubic foot of exhaust gas

(9VAC5-80-110 and 9VAC5-40-2270)

Woodworking Requirements - Limitations – Visible Emissions Limits – (3-E1) - Visible emissions from the cutting/planer/re-saw shall not exceed 20 percent opacity except during one six-minute period in each hour in which visible emissions shall not exceed 60 percent (60%) as determined by EPA Method 9 (reference 40 CFR 60 Appendix A).

(9VAC5-80-110 and 9VAC5-40-2280 referencing 9VAC5-40-60 et seq.)

Woodworking Requirements - Limitations – Emissions Limits - (501-E2) - Emissions from the operation of the Foundry Pattern Shop wood cutting machines shall not exceed the limits specified below:

Particulate Matter (PM)

0.5 grains per standard cubic foot of exhaust gas

(9VAC5-80-110 and 9VAC5-40-2270)

Woodworking Requirements - Limitations – Visible Emissions Limits – (501-E2) - Visible emissions from the Foundry Pattern Shop wood cutting machines shall not exceed 20 percent (20%) opacity except during one six-minute period in each hour in which visible emissions shall not exceed 60 percent (60%) as determined by EPA Method 9 (reference 40 CFR 60 Appendix A). (9VAC5-80-110 and 9VAC5-40-2280 referencing 9VAC5-40-60 et seq.)

146. **Woodworking Requirements - Limitations – Emissions Limits - (513-E1) -** Emissions from the operation of the Warehouse No. 6 Saws shall not exceed the limits specified below:

Particulate Matter (PM)

0.5 grains per standard cubic foot of exhaust gas

(9VAC5-80-110 and 9VAC5-40-2270)

147. **Woodworking Requirements - Limitations** – **Visible Emissions Limits - (513-E1) -** Visible emissions from the Warehouse No. 6 Saws shall not exceed 20 percent (20%) opacity except during one six-minute period in each hour in which visible emissions shall not exceed 60 percent (60%) as determined by EPA Method 9 (reference 40 CFR 60 Appendix A).

(9VAC5-80-110 and 9VAC5-40-2280 referencing 9VAC5-40-60 et seq.)

Page 62 of 103

Woodworking Requirements - Limitations - Emission Controls - (All Units) - Particulate emissions from Woodworking Operations shall be controlled by the use of cyclones or dust collectors. The cyclones and dust collectors shall be provided with adequate access for inspection and shall be in operation when the process is operating.

(9VAC5-80-110 and 9VAC5-40-2270)

Monitoring

- Woodworking Requirements Monitoring Visible Emissions Evaluations (3-E1 and 513-E1) The permittee shall perform a visible emissions evaluation (VEE) at least once per month during normal operations and daylight hours for at least six minutes, in accordance with Method 9 (40 CFR 60, Appendix A). If the VEE opacity average for the stack exceeds ten percent (10%), the VEE shall continue for one hour from initiation to determine compliance with the opacity limit. The permittee shall keep records in accordance with EPA Method 9 and maintain the records at the facility for inspection by DEQ for the most recent 5-year period. (9VAC5-80-110)
- 150. **Woodworking Requirements Monitoring Cyclone Inspections (3-E1 and 513-E1) -** The permittee shall inspect the cyclones once per month for structural integrity and record the results in a logbook. (9VAC5-80-110)
- Woodworking Requirements Monitoring Baghouse (501-C2) The permittee shall observe the exhaust stack of the Foundry Pattern Shop dust collector for visible emissions for at least six minutes once per month during daylight hours of operation. If visible emissions are noted, corrective action shall be taken to eliminate the visible emissions. If visible emissions continue after corrective action, a visible emissions evaluation (VEE) shall be immediately conducted on the boiler stack for at least six minutes in accordance with Method 9 (40 CFR 60, Appendix A). If the VEE opacity average for the boiler stack exceeds ten percent (10%), the VEE shall continue for one hour from initiation to determine compliance with the opacity limits. Results of observations and/or VEEs shall be recorded in an operation log. Records of observations shall include the following:
 - a. The name of the observer.
 - b. Date and time of the observation.
 - c. An indication that the process was operating.
 - d. An indication of the presence or absence of visible emissions.
 - e. Any corrective action taken to eliminate visible emissions, including the date and time the process was shut down and/or repairs were completed.

If a VEE is conducted, records shall be in accordance with Method 9 (40 CFR 60,Appendix A). (9VAC5-80-110)

Permit Number: TRO-60153 May 23, 2019 Page 63 of 103

Recordkeeping

- Woodworking Requirements Recordkeeping (All Units) The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the DEQ Tidewater Regional Office. These records shall include, but are not limited to:
 - a. Visible emission evaluations (VEE) records in accordance with Method 9 (40 CFR 60 Appendix A).
 - b. All cyclone structural integrity evaluations.
 - c. Visible emission observations (VEO) records to include the name of the observer, the date and time of the observations, the presence of visible emissions or lack thereof, and the date and time of corrective actions taken whenever visible emissions were observed.

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years. (9VAC5-80-110)

Testing

Woodworking Requirements - Testing - (All Units) - If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the appropriate method(s) in accordance with procedures approved by the DEQ. (9VAC5-80-110)

Page 64 of 103

X. Flame Spray Facility Requirements

Limitations

154. **Flame Spray Facility –Limitations** – (4701-E10, 4701-E11, 4701-E12, and 4701-E13) - Total combined VOC emissions from the operation of the flame spray facility shall not exceed the limitations specified below:

VOC 8 lbs/hour 40 lbs/day 7 tons/year

(9VAC5-80-110 and Condition 4 of the 2/12/86 NSR Permit)

Flame Spray Facility Requirements –Limitations - (4701-E10, 4701-E11, 4701-E12, and 4701-E13) - Except where this permit is more restrictive than the applicable requirement, the painting operations shall be operated in compliance with the requirements of 40 CFR 63, Subpart II. (9VAC5-80-110 and 40 CFR 63, Subpart II)

Recordkeeping

156. Flame Spray Facility - Recordkeeping - (4701-E10, 4701-E11, 4701-E12, and 4701-E13) - The permittee shall maintain daily records of paint and coating usage (in gallons) and VOC content (as applied) per coating for the flame spray operation. The permittee shall calculate VOC emissions in pounds per hour and pounds per day once per calendar day based on the daily usage and VOC content (as applied) per coating. Daily is defined as the 24-hour period beginning at midnight of each calendar day and ending at 11:59 pm. Utilizing daily VOC emissions calculations, the permittee shall calculate annual VOC emissions in tons per year monthly as the sum of each consecutive 12-month period. Records of emissions calculations shall be maintained at the facility for inspection by DEQ for the most recent 5-year period. (9VAC5-80-110 and Condition 5 of the 2/12/86 NSR Permit)

Page 65 of 103

XI. Satellite Blast and Coat Facility Requirements

Limitations

157. Satellite Blast and Coat Facility Requirements - Limitations - Emissions Limits - (SBF-E1) -

Emissions from the operation of the abrasive blasting process equipment (Unit Ref. No. SBF-E1) shall not exceed the limits specified below:

 PM_{10}

2.3 lbs/hour

0.4 tons/year

These emissions are derived from the estimated overall emissions contribution from the operating limits. Exceedance of the operating limits may be considered credible evidence of the exceedance of emissions limits. Compliance with these emissions limits may be determined as stated in Conditions 159, 161, 164, 166, and 167 of this permit.

(9VAC5-80-110 and Condition 10 of the 6/7/10 NSR Permit)

Satellite Blast and Coat Facility Requirements - Limitations - Emissions Limits - (SPF-E1) - Emissions from the operation of the marine coating process equipment (Unit Ref. No. SPF-E1) shall not exceed the limits specified below:

VOC

2.18 lbs/hour

9.2 tons/year

These emissions are derived from the estimated overall emissions contribution from the operating limits. Exceedance of the operating limits may be considered credible evidence of the exceedance of emissions limits. Compliance with these emissions limits may be determined as stated in Condition 160, 162, 163, 164, 165, 166, and 167 of this permit.

(9VAC5-80-110 and Condition 11 of the 6/7/10 NSR Permit)

- Satellite Blast and Coat Facility Requirements Limitations Visible Emissions Limits (SBF-E1 and SPF-E1) Visible emissions from each exhaust stack of the abrasive blasting and marine coating processes shall not exceed five percent opacity (5%) as determined by EPA Method 9 (reference 40 CFR 60 Appendix A). This condition applies at all times except during startup, shutdown, and malfunction. (9VAC5-80-11, 9VAC5-50-260, and Condition 12 of the 6/7/10 NSR Permit)
- 159. **Satellite Blast and Coat Facility Requirements Limitations Emission Controls (SBF-E1) -**Particulate emissions from the abrasive blasting equipment in the fabric-covered shelter (Unit Ref. No. SBF-E1) shall be controlled by high efficiency cartridge filters. The cartridge filters shall be provided with adequate access for inspection and shall be in operation when the abrasive blasting process is operating. The fabric-covered shelter shall be kept closed during operation.

 (9VAC5-80-110 and Condition 3 of the 6/7/10 NSR Permit)
- Satellite Blast and Coat Facility Requirements Limitations Emission Controls (SPF-E1) Particulate emissions from the marine coating equipment in the fabric-covered shelter (Unit Ref. No. SPF-E1) shall be controlled by high efficiency cartridge filters. The cartridge filters shall be provided with adequate access for inspection and shall be in operation when the marine coating process is operating. The fabric-covered shelter shall be kept closed during operation.

 (9VAC5-80-110 and Condition 4 of the 6/7/10 NSR Permit)

- Satellite Blast and Coat Facility Requirements Limitations Throughput (SBF-E1) The throughput of abrasive blast media shall not exceed 3,000 tons per year, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
 - (9VAC5-80-110 and Condition 7 of the 6/7/10 NSR Permit)
- Satellite Blast and Coat Facility Requirements Limitations Throughput (SPF-E1) The throughput of marine coating shall not exceed 6,500 gallons per year, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
 - (9VAC5-80-110 and Condition 8 of the 6/7/10 NSR Permit)
- Satellite Blast and Coat Facility Requirements Limitations Requirements by Reference (SPF-E1) Except where this permit is more restrictive than the applicable requirement, the marine coating operation (Unit Ref. No. SPF-E1) shall be operated in compliance with the requirements of 40 CFR 63 Subpart II. (9VAC5-80-110 and Condition 9 of the 6/7/10 NSR Permit)

Monitoring

- 164. **Satellite Blast and Coat Facility Requirements (SBF-E1 and SPF-E1) Monitoring Monitoring Devices** Each cartridge filter shall be equipped with a device to continuously measure the differential pressure drop across the filter. Each monitoring device shall be installed, maintained, and operated in accordance with approved procedures which shall include, as a minimum, the manufacturer's written requirements or recommendations. Each monitoring device shall be provided with adequate access for inspection and shall be in operation when the process is operating.

 (9VAC5-80-110 and Condition 5 of the 6/7/10 NSR Permit)
- Satellite Blast and Coat Facility Requirements Monitoring Monitoring Device Observation (SBF-E1 and SPF-E1) To ensure good performance, the monitoring device used to continuously measure the pressure drop across each cartridge filter shall be observed by the permittee with a frequency of not less than once per operating day. The permittee shall keep a log of the monitoring device observations. The log shall include the name of the observer, the date and time the observation was made, an indication that the process was operating, the acceptable pressure drop range, the measured pressure drop, and a description of the corrective actions taken whenever a pressure drop outside the acceptable range was observed, including the date and time repairs were completed.

 (9VAC5-80-110 and Condition 6 of the 6/7/10 NSR Permit)
- Satellite Blast and Coat Facility Requirements Monitoring Visible Emissions Observations (SBF-E1 and SPF-E1) The permittee shall observe each exhaust stack of the abrasive blasting and marine coating processes at least once per operating day (Monday-Sunday) during normal operation for visible emissions for at least six minutes. If any visible emissions are noted, corrective action shall be taken to eliminate the visible emissions. Results of observations and any corrective action shall be recorded in an operation log. Records of observations shall include the following:

- a. The name of the observer.
- b. Date and time of the observation.
- c. An indication that the process was operating.
- d. An indication of the presence or absence of visible emissions.
- e. Any corrective action taken to eliminate visible emissions, including the date and time the process was shut down, and /or repairs were completed.

(9VAC5-80-110 and Condition 13 of the 6/7/10 NSR Permit)

Recordkeeping

- Satellite Blast and Coat Facility Requirements Recordkeeping (SBF-E1 and SPF-E1) The permittee shall maintain records of emission data and operating parameters as necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the DEQ Tidewater Regional Office. These records shall include, but are not limited to:
 - a. Annual throughput of abrasive blasting media in tons, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
 - b. Annual throughput of marine coating in gallons, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
 - c. Material Safety Data Sheets (MSDS), Certified Product Data Sheets (CPDS), or other vendor information as approved by DEQ showing the VOC content and solids content for each coating used.
 - d. Monthly and annual emissions calculations for VOC from the process stacks using calculation methods approved by the DEQ Tidewater Regional Office to verify compliance with the tons/year emissions limitation in Section XI.A. Annual emissions shall be calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
 - e. Monitoring records for the air pollution control device, as required in Condition 165.
 - f. Visible emission observation records and any corrective action taken, as required in Condition 166.

Huntington Ingalls Incorporated - Newport News Shipbuilding

Permit Number: TRO-60153

May 23, 2019 Page 68 of 103

These records shall be available for inspection by the DEQ and shall be current for the most recent five years.

(9VAC5-80-110 and Condition 14 of the 6/7/10 NSR Permit)

Page 69 of 103

XII. Blast and Coat Facility West Requirements

Limitations

Blast and Coat Facility West Requirements - Limitations – Emissions Limits – (4730-SBCF-E2 and 4730-SBCF-E3) - Emissions from the marine coating process equipment (Unit Ref. Nos. 4730-SBCF-E2 and 4730-SBCF-E3) located in Buildings 1884 and 1885) shall not exceed the limits specified below:

VOC 308.2 lbs/hour 24.1 tons/year

These emissions are derived from the estimated overall emissions contribution from the operating limits. Exceedance of the operating limits may be considered credible evidence of the exceedance of emissions limits. Compliance with these emissions limits may be demonstrated as stated in Conditions 173 and 179. (9VAC5-80-110 and Condition 11 of the 11/17/14 NSR Permit)

Blast and Coat Facility West Requirements - Limitations – Visible Emissions Limits – (4730-SBCF-E1) - Visible emissions from the exhaust stack of each portable dust collector for the abrasive blasting process (Unit Ref. No. 4730-SBCF-E1) and each exhaust stack of the marine coating processes (Unit Ref. No. 4730-SBCF-E3) shall not exceed five percent (5%) opacity as determined by EPA Method 9 (reference 50 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown, and malfunction.

(9VAC5-80-110, and 9VAC5-50-260, and Condition 12 of the 11/17/14 NSR Permit)

- 170. **Blast and Coat Facility West Requirements Limitations Emission Controls (4730-SBCF-E1) -**Particulate emissions from the abrasive blasting equipment in the fabric-covered shelter (Unit Ref. No. 4730-SBCF-E1) shall be controlled by portable dust collectors with high efficiency cartridge filters. The permittee shall operate a sufficient number of portable dust collectors to prevent visible emissions from escaping the shelter. The portable dust collectors shall be provided with adequate access for inspection. The fabric-covered shelter shall be kept closed during operation of the abrasive blasting process equipment. (9VAC5-80-110 and Condition 3 of the 11/17/14 NSR Permit)
- Blast and Coat Facility West Requirements Limitations Emission Controls (4730-SBCF-E2 and 4730-SBCF-E3) Particulate emissions from the marine coating equipment in the fabric-covered shelters (Unit Ref. Nos. 4730-SBCF-E2 and 4730-SBCF-E3) shall be controlled by dry filters. The dry filters shall be provided with adequate access for inspection and shall be in operation when the marine coating process equipment is operating. The fabric-covered shelters shall be kept closed during operation of the marine coating process equipment.

(9VAC5-80-110 and Condition 5 of the 11/17/14 NSR Permit)

Blast and Coat Facility West Requirements - Limitations - Throughput - (4730-SBCF-E1) - The throughput of abrasive blast media through the abrasive blasting process (Unit Ref. No. 4730-SBCF-E1) shall not exceed 4,000 tons per year, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months. (9VAC5-80-110 and Condition 8 of the 11/17/14 NSR Permit)

Page 70 of 103

Blast and Coat Facility West Requirements - Limitations - Throughput - (4730-SBCF-E2 and 4730-SBCF-E3) - The throughput of marine coating through the marine coating processed (Unit Ref. Nos. 4730-SBCF-E2 and 4730-SBCF-E3) shall not exceed 15,000 gallons per year, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.

(9VAC5-80-110 and Condition 9 of the 11/17/14 NSR Permit)

Blast and Coat Facility West Requirements - Limitations - Requirements by Reference - (4730-SBCF-E2 and 4730-SBCF-E3) - Except where this permit is more restrictive than the applicable requirement, the marine coating equipment (Unit Ref. Nos. 4730-SBCF-E2 and 4730-SBCF-E3) shall be operated in compliance with the requirements of 40 CFR 63, Subpart II. (9VAC5-80-110 and Condition 10 of the 11/17/14 NSR Permit)

Monitoring

- Blast and Coat Facility West Requirements Monitoring Fugitive Emissions Observations (4730-SBCF-E1) To ensure that a sufficient number of portable dust collectors is used to control the particulate emissions from the abrasive blasting process (Unit Ref. No. 4730-SBCF-E1), the permittee shall observe each opening of the fabric-covered shelter housing the abrasive blasting process equipment for fugitive emissions after start-up of the equipment on each operating day. If any fugitive emissions are noted, corrective action shall be taken immediately to eliminate the emissions. Corrective action shall involve the addition of one or more portable dust collectors with high efficiency cartridge filters. Results of observations and corrective actions shall be recorded in an operation log. Records shall include the following:
 - a. The name of the observer.
 - b. Date and time of the observation.
 - c. An indication that the abrasive blasting process equipment was operating.
 - d. An indication of the presence or absence of fugitive emissions.
 - e. The duration of any fugitive emission incident.
 - f. Any corrective action taken to eliminate fugitive emissions.

(9VAC5-80-110 and Condition 4 of the 11/17/14 NSR Permit)

Blast and Coat Facility West Requirements - Monitoring - Monitoring Devices - (4730-SBCF-E1, 4730-SBCF-E2, and 4730-SBCF-E3) - Each cartridge filter for the abrasive blasting process (Unit Ref. No. 4730-SBCF-E1) and each dry filter for the marine coating processed (Unit Ref. Nos. 4730-SBCF-E2 and 4730-SBCF-E3) shall be equipped with a device to continuously measure the differential pressure drop across the filter. Each monitoring device shall be installed, maintained, and operated in accordance with approved procedures which shall include, as a minimum, the manufacturer's written requirements or

recommendations. Each monitoring device shall be provided with adequate access for inspection and shall be in operation when the process is operating.

(9VAC5-80-110 and Condition 6 of the 11/17/14 NSR Permit)

- Blast and Coat Facility West Requirements Monitoring Monitoring Device Observation (4730-SBCF-E1, 4730-SBCF-E2, and 4730-SBCF-E3) To ensure good performance, the monitoring devices used to continuously measure the pressure drop across each cartridge filter and dry filter shall be observed by the permittee with a frequency of not less than once per operating day. The permittee shall establish an acceptable pressure drop range based on manufacturer recommendations or good engineering judgment. Prompt corrective action shall be taken whenever the pressure drop is outside the acceptable range. The permittee shall keep a log of the monitoring device observations. The log shall include:
 - a. The name of the observer.
 - b. The date and time the observation was made.
 - c. An indication that the process was operating.
 - d. The acceptable pressure drop range.
 - e. The measured pressure drop.
 - f. A description of the corrective actions taken whenever a pressure drop outside the acceptable range was observed, including the date and time repairs were completed.

(9VAC5-80-110 and Condition 7 of the 11/17/14 NSR Permit)

Blast and Coat Facility West Requirements - Monitoring - Visible Emissions Observations - (4730-SBCF-E1) - The permittee shall observe the exhaust stack of each portable dust collector for the abrasive blasting process (Unit Ref. No. 4730-SBCF-E1) at least once per week (Monday-Sunday) during normal operation for visible emissions for at least six minutes. If any visible emissions are noted, corrective action shall be taken to eliminate the visible emissions. Results of observations and corrective actions shall be recorded in an operation log. Records shall include the following:

- a. The name of the observer,
- b. Date and time of the observation,
- c. An indication that the abrasive blasting process equipment was operating,
- d. An indication of the presence or absence of visible emissions,
- e. The duration of any visible emission incident, and
- f. Any corrective action taken to eliminate visible emissions.

(9VAC5-80-110 and Condition 13 of the 11/17/14 NSR Permit)

Recordkeeping

- Blast and Coat Facility West Requirements Recordkeeping (4730-SBCF-E1, 4730-SBCF-E2, and 4730-SBCF-E3) The permittee shall maintain records of emission data and operating parameters as necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the DEQ Tidewater Regional Office. These records shall include, but are not limited to:
 - a. Annual throughput of abrasive blast media through the abrasive blasting process (Unit Ref. No. 4730-SBCF-E1) (in tons), calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
 - b. Annual throughput of marine coating through the marine coating process (Unit Ref. No. 4730-SBCF-E2 and 4730-SBCF-E3) (in gallons), calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
 - c. Material Safety Data Sheets (MSDS), Certified Product Data Sheets (CPDS), **or** other vendor information as approved by DEQ showing the VOC content and solids content for each coating used.

Permit Number: TRO-60153

May 23, 2019 Page 73 of 103

- d. Monthly and annual emissions calculations for VOC from the spray coating process stacks (Unit Ref. Nos. 4730-SBCF-E2 and 4730-SBCF-E3) using calculation methods approved by the DEQ Tidewater Regional Office to verify compliance with the tons/year emission limitation in Section XII.A. Annual emissions shall be calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
- e. Fugitive emissions observation records and any corrective action taken, as required in Condition 175.
- f. Control device monitoring records for the air pollution control devices, as required in Condition 177
- g. Visible emissions observation records and any corrective action taken, as required in Condition 178

These records shall be available for inspection by the DEQ and shall be current for the most recent five years.

(9VAC5-80-110 and Condition 14 of the 11/17/14 NSR Permit)

Permit Number: TRO-60153 May 23, 2019 Page 74 of 103

XIII. Shipyard MACT Requirements

Limitations

180. Shipyard MACT Requirements - Limitations - (All Units) - Unless otherwise specified, VOC and HAP emissions from marine coatings are subject to the provisions of 40 CFR 63 Subpart II - National Emission Standards for Shipbuilding and Ship Repair (Surface Coating). No owner or operator of any existing or new affected source shall cause or allow the application of any coating to a ship with an as-applied VOHAP content exceeding the applicable limits given in Table 2 of 40 CFR 63 Subpart II, as determined by the procedures described in 40 CFR 63.785 (a), (b), or (c)(1) through (c)(4). For the compliance procedures described in Sec. 63.785 (c)(1) through (c)(3), VOC shall be used as a surrogate for VOHAP, and Method 24 of Appendix A to 40 CFR Part 60 shall be used as the definitive measure for determining compliance. For the compliance procedure described in 40 CFR 63.785(c)(4), an alternative test method capable of measuring independent VOHAP shall be used to determine compliance. The method must be submitted to and approved by DEQ.

(9VAC5-80-110 and 40 CFR 63.783(a))

Monitoring and Recordkeeping

181. Shipyard MACT Requirements - Monitoring and Recordkeeping - (All Units) - For each batch of marine coating that is received by the facility, the permittee shall determine the coating category, the applicable VOHAP limit as specified in 40 CFR 63.783(a), and certify the as-supplied VOC content as specified in 40 CFR 63.785(a)(2) or (b)(1). The permittee may use a certification supplied by the manufacturer for the batch, although the permittee retains liability should subsequent testing reveal a violation. If the permittee performs the certification testing, only one of the containers in which the batch coating was received is required to be tested. In lieu of testing each batch of coating, as applied, the permittee may determine compliance with the VOHAP limits using any combination of the procedures described in 40 CFR 63.785 Paragraphs (c)(1), (c)(2), (c)(3), and (c)(4). The procedure used for each coating shall be determined and documented prior to application. The permittee shall log such data in a logbook to be maintained at the facility for inspection by DEQ for the most recent 5-year period. The results of any compliance demonstration conducted by the permittee or any regulatory agency using Method 24 shall take precedence over the results using the procedures in 40 CFR 63.785 Paragraphs (c)(1), (c)(2), or (c)(3). The results of any compliance demonstration conducted by the permittee or any regulatory agency using an approved test method to determine VOHAP content shall take precedence over the results using the procedures in 40 CFR 63.785 Paragraph (c)(4).

(9VAC5-80-110 and 40 CFR 63.785(a) and (b))

- Shipyard MACT Requirements Monitoring and Recordkeeping (All Units) The permittee shall ensure that all handling and transfer of VOC-containing marine coating materials to and from containers, tanks, vats, drums, and piping systems is conducted in a manner that minimizes spills. The permittee shall inspect all containers, tanks, vats, drums, and piping systems once monthly to ensure that they are free of cracks, holes, and other defects. All containers, vats, drums, and piping systems housing VOC-containing marine coating materials shall remain closed unless materials are being added to or removed from them. Such procedures shall be documented in the facility's Shipbuilding and Ship Repair NESHAP Implementation Plan approved on 2/4/2013.
 - (9VAC5-80-110, 40 CFR 63.783(b)(1) and (b)(2), and the Shipbuilding and Ship Repair NESHAP Implementation Plan submitted to DEQ on 1/17/2013)
- 183. **Shipyard MACT Requirements Monitoring and Recordkeeping (All Units) -** The permittee shall record the total volume of marine coatings applied at the facility to ships. Such records shall be compiled monthly and maintained at the facility for a minimum of 5 years. (9VAC5-80-110 and 40 CFR 63.788(b)(1))
- 184. **Shipyard MACT Requirements Monitoring and Recordkeeping (All Units) -** The permittee shall compile records of marine coatings on a monthly basis and maintain such records for a minimum of 5 years. Such records shall include, at a minimum:
 - a. All documentation supporting initial notification;
 - b. A copy of the facility's approved implementation plan;
 - c. The volume of each low-usage-exempt coating applied;
 - d. Identification of the coatings used, their appropriate coating categories, and the applicable VOC limit;
 - e. Certification of the as-supplied VOC content of each batch of coating;
 - f. A determination of whether containers meet the standards as described in 40 CFR 63.783(b)(2);
 - g. The results of any Method 24 (as referenced in 40 CFR 60, Appendix A) or approved VOC measurement test conducted on individual containers of coating, as applied; and
 - h. Any additional records as required by 40 CFR 63.788(b)(3) and (b)(4).

(9VAC5-80-110 and 40 CFR 63.788(b)(1) through (b)(4))

May 23, 2019 Page 76 of 103

Testing

Shipyard MACT Requirements - Testing - (All Units) - For the compliance procedures described in 40 CFR 63.785(c)(1) through (c)(3), Method 24 of 40 CFR Part 60, Appendix A is the definitive method for determining the VOC content of coatings, as supplied or as applied. Compliance with each limitation in Section XIII.A shall be based on compliance with the monitoring, recordkeeping, and reporting provisions of this section.

(9VAC5-80-110 and 40 CFR 63.786(a))

Shipyard MACT Requirements - Testing - (All Units) - If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the appropriate method(s) in accordance with procedures approved by the DEQ. (9VAC5-80-110)

Reporting

Shipyard MACT Requirements - Reporting - (All Units) - Before the 60th day following completion of each 6-month period after the compliance date specified in 40 CFR 63.784, the permittee shall submit a VOC report on marine coatings to the DEQ Tidewater Regional Office for each of the previous 6 months. The report shall include all of the information that must be retained pursuant to 40 CFR 63.788(b)(2) through (b)(3), except for that information specified in 40 CFR 63.788(b)(2)(i) through (ii), (b)(2)(v), (b)(3)(i)(A), (b)(3)(ii)(A), and (b)(3)(iii)(A). If a violation is detected, the permittee shall also report the information specified in 40 CFR 63.788(b)(4) for the reporting period during which the violation(s) occurred. To the extent possible, the report shall be organized according to the compliance procedure(s) followed each month by the permittee.

(9VAC5-80-110 and 40 CFR 63.788(c))

Page 77 of 103

XIV.Specialty Shops Requirements

Limitations

- Specialty Shops Requirements Limitations Process Emissions Limits (64-E1) Particulate Matter (PM) Emissions from the Electrical Shop drill press/sander (not used for wood) shall not exceed E=4.10P^{0.67} where P is the process weight rate in tons/hour and E is the PM emission rate in lbs/hour. (9VAC5-80-110 and 9VAC5-40-260)
- Specialty Shops Requirements Limitations Process Emissions Limits (64-E2) Particulate Matter (PM) Emissions from the Electrical Shop saw shall not exceed E=4.10P^{0.67} where P is the process weight rate in tons/hour and E is the PM emission rate in lbs/hour. (9VAC5-80-110 and 9VAC5-40-260)
- 190. **Specialty Shops Requirements Limitations Process Emissions Limits (64-E9) -** Particulate Matter (PM) Emissions from grinding metal shall not exceed E=4.10P^{0.67} where P is the process weight rate in tons/hour and E is the PM emission rate in lbs/hour. (9VAC5-80-110 and 9VAC5-40-260)
- 191. **Specialty Shops Requirements Limitations Process Emissions Limits (60-E2) -** Particulate Matter (PM) Emissions from grinding operations shall not exceed E=4.10P^{0.67} where P is the process weight rate in tons/hour and E is the PM emission rate in lbs/hour. (9VAC5-80-110 and 9VAC5-40-260)
- Specialty Shops Requirements Limitations Process Emissions Limits (4896-E1) Particulate Matter (PM) Emissions from Melamine Operations (2 Milling Machines, Band Saw, and Lathe) shall not exceed E=4.10P^{0.67} where P is the process weight rate in tons/hour and E is the PM emission rate in lbs/hour. (9VAC5-80-110 and 9VAC5-40-260)
- 193. **Specialty Shops Requirements Limitations Process Emissions Limits (64-E3) -** Particulate Matter (PM) Emissions from the Bayco Model BB 288 burn-out oven shall not exceed E=4.10P^{0.67} the limits specified below:

Particulate Matter (PM)

0.16 lbs/hour

0.71 tons/year

(9VAC5-80-110 and Condition 2 of the 10/18/1979 NSR Permit)

Specialty Shops Requirements - Limitations – Visible Emissions Limit – (64-E1, 64-E2, 64-E9, 60-E2, and 4896-E1) - Visible Emissions from the electrical Shop drill press/sander (not used for wood), Electrical Shop saw, grinding metal, grinding operations, and melamine operations shall not exceed 20 percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 60 percent (60%) as determined by EPA Method 9 (reference 40 CFR 60, Appendix A). (9VAC5-80-110 and 9VAC5-40-80)

Specialty Shops Requirements - Limitations – Visible Emissions Limits – (64-E3) - Visible emissions from the Bayco Model BB 288 burn-out oven shall not exceed 20 percent opacity except during one sixminute period in any one hour in which visible emissions shall not exceed 30 percent as determined by EPA Method 9 (reference 40 CFR 60, Appendix A). (9VAC5-80-110 and 9VAC5-50-80)

196. **Specialty Shops Requirements - Limitations - Emission Controls - (64-E3) -** Emissions from the burn-out oven shall be controlled by an afterburner. The afterburner shall be provided with adequate access for inspection.

(9VAC5-80-110 and the 10/18/79 NSR Permit)

- 197. **Specialty Shops Requirements Limitations Fuel (64-E3) -** The approved fuel for the burn-out oven is propane. A change in the fuel may require a permit to modify and operate. (9VAC5-80-110 and Condition 6 of the 10/18/79 NSR permit)
- 198. **Specialty Shops Requirements Limitations Process Emissions Limits (5-E3) -** Emissions from the operation of the deburring machine shall not exceed the limits specified below:

Particulate Matter (PM)	0.6 lb/hour	2.5 tons/year
PM_{10}	0.6 lb/hour	2.5 tons/year
PM _{2.5}	0.6 lb/hour	2.5 tons/year

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits may be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Conditions 199, 205, and 206 of this permit.

(9VAC5-80-110 and Condition 4 of the 8/2/16 NSR Permit)

199. **Specialty Shops Requirements - Limitations – Emissions Controls – (5-E3) -** Particulate Matter (PM), PM₁₀, and PM_{2.5} emissions from the deburring process shall be controlled by a wet dust collector. The wet dust collector shall be provided with adequate access for inspection and shall be in operation when the deburring machine is operating.

(9VAC5-80-110 and Condition 1 of the 8/2/16 NSR Permit)

200. **Specialty Shops Requirements - Limitations – Visible Emissions Limits – (5-E3) -** Visible emissions from the Costa 3-stage dry Deburring Machine shall not exceed 5 percent (5%) opacity as determined by EPA Method 9 (reference 40 CFR 60), Appendix A). This condition applies at all times except during startup, shutdown, and malfunction.

(9VAC5-80-110 and Condition 5 of the 8/2/16 NSR Permit)

- Specialty Shops Requirements Limitations Rule 4-24 (FAC-PW) Cold cleaning parts washers shall be equipped with a control method that will remove, destroy, or prevent the discharge into the atmosphere of at least 85% by weight of volatile organic compound emissions. Achievement of the VOC emission standard shall be achieved by complying with the applicable control requirements and operating requirements in 9VAC5-40-3290 C.1 and C.2, respectively. (9VAC5-40-3290 and 9VAC5-80-110)
- Specialty Shops Requirements Limitations Rule 4-24 (FAC-PW) Disposal of waste solvent from the parts washer operations should be achieved by reclamation (either by outside services or in-house) or by incineration. Disposal records shall be maintained at the facility for the most recent 5-year period. (9VAC5-40-3290)
- 203. **Specialty Shops Requirements Limitations VOC Disposal (FAC-PW) -** At all times the disposal of volatile organic compounds shall be accomplished by taking measures, to the extent practicable, consistent with air pollution control practices for minimizing emissions. Volatile organic compounds shall not be intentionally spilled, discarded in sewers which are not connected to a treatment plant, or stored in open containers or handled in any other manner that would result in evaporation beyond that consistent with air pollution control practices for minimizing emissions.

 (9VAC5-40-20 and 9VAC5-80-110)

Monitoring

- Specialty Shops Requirements Monitoring Visible Emissions Observations (All Units Except FAC-PW and 5-E3) The permittee shall monitor each of the units in the Specialty Shop operations except for the parts washers (FAC-PW and 5-E3) at least once per month when in operation for visible emissions for at least six minutes. If visible emissions are noted, corrective action shall be taken to eliminate the visible emissions. If visible emissions continue after corrective actions, a visible emissions evaluation (VEE) shall be immediately conducted on the stack for at least six minutes in accordance with Method 9 (40 CFR 60, Appendix A). If the VEE opacity average for the stack exceeds ten percent (10%), the VEE shall continue for one hour from initiation to determine compliance with the opacity limit. Results of observations and/or VEEs shall be recorded in an operation log. Records of observations shall include the following:
 - a. The name of the observer.
 - b. Date and time of the observation.
 - c. An indication that the process was operating.
 - d. An indication of the presence or absence of visible emissions.
 - e. Any corrective action taken to eliminate visible emissions, including the date and time the process was shut down and/or repairs were completed.

If a VEE is conducted, records shall be in accordance with Method 9 (40 CFR 60, Appendix A). (9VAC5-80-110)

Specialty Shops Requirements - Monitoring – (5-E3) - The wet dust collector shall be equipped with a monitoring probe to continuously monitor the water level in the system. The monitoring probe shall be installed, maintained, calibrated, and operated in accordance with the approved procedures which shall include, as a minimum, the manufacturer's written requirements or recommendations. The monitoring probe shall be provided with adequate access for inspection and shall be in operation when the deburring machine (Unit Ref. No. 5-E3) is operating.

(9VAC5-80-110 and Condition 2 of the 3/223/22 NSR Permit)

206. **Specialty Shops Requirements - Monitoring – Monitoring Device Observation - (5-E3)** – To ensure good performance of the monitoring probe used to continuously monitor the water level in the wet dust collector system, the permittee shall, on a weekly basis, check the monitoring probe to ensure it is secure. If the monitoring probe is slightly loose, the permittee shall tighten the terminal screw. If there is evidence that the monitoring probe has moved up or down, the permittee shall tag out the machine from use and contact the monitoring device manufacturer. The permittee shall keep a log of the observations. The log shall include the name of the observer, the date and time of the observations, and the date and time of corrective actions taken.

(9VAC5-80-110 and Condition 3 of the 8/2/16 NSR Permit)

- 207. **Specialty Shops Requirements Monitoring Visible Emissions (5-E3) -** The wet dust collector shall be observed at least once per day, during says on which the system is operating to determine the presence of visible emissions. The presence of visible emissions shall indicate the need for prompt corrective action, which shall include, but not be limited to: check the water level and fill the collector's basin with water to the indicated water level, inspect filter panels for dust buildup and service as needed, inspect all equipment surfaces for buildup and wiped down as needed. The permittee shall keep a log of the observations. The log shall include the name of the observer, the date and time of the observations, the presence of visible emissions or lack thereof, and the date and time of corrective actions taken. (9VAC5-80-110 and Condition 6 of the 8/2/16 NSR Permit)
- Specialty Shops Requirements Monitoring Rule 4-24 (FAC-PW) The permittee shall inspect each parts washer unit once per calendar year to ensure compliance with the control requirements of 9VAC5-40-3290 C. If such inspections indicate any condition of non-compliance, appropriate action shall be taken to correct the problem.

 (9VAC5-40-3290 and 9VAC5-80-110)

Recordkeeping

- 209. **Specialty Shops Requirements Recordkeeping (All Units) -** The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the DEQ Tidewater Regional Office. These records shall include, but are not limited to:
 - a. Records of visible emissions observations and visible emission evaluations (VEE), if performed.

- b. Weekly observations of monitoring probe used to continuously monitor the water level in the wet dust collector system (5-E3).
- c. Records of waste solvent disposal.
- d. Records of parts-washer inspections and corrective actions taken.
- e. These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.

(9VAC5-80-110 and Condition 7 of the 8/2/16 NSR Permit)

Testing

- 210. **Specialty Shops Requirements Testing (All Units except FAC-PW) -** If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the appropriate method(s) in accordance with procedures approved by the DEQ. (9VAC5-80-110)
- Specialty Shops Requirements Testing (5-E3) The deburring machine shall be installed so as to allow for emissions testing upon reasonable notice at any time, using appropriate methods. This includes constructing the facility/equipment such that volumetric flow rates and pollutant emissions rates can be accurately determined by applicable test methods and providing a stack or duct that is free from cyclonic flow. Sampling ports shall be provided when requested at the appropriate locations and safe sampling platforms and access shall be provided.

(9VAC5-80-110 and Condition 8 of the 8/2/16 NSR Permit)

Reporting

- 212. **Specialty Shops Requirements Initial Notifications (5-E3)** The permittee shall furnish written notification to the DEQ Tidewater Regional Office of:
 - a. The actual date on which construction of the deburring machine commenced, within 30 days after such date.
 - b. The actual start-up date of the deburring machine within 15 days after such date. (9VAC5-80-110 and Condition 9 of the 8/2/16 NSR Permit)

Page 82 of 103

XV. Miscellaneous Activities Requirements

Limitations

- 213. Miscellaneous Activities Requirements Limitations Visible Emissions Limit (205-B1 and 205-B2) Visible emissions from the powder coating facility shot blast units (Unit Ref. Nos. 205-B1 and 205-B2) shall not exceed 20 percent (20%) opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 30 percent (30%) as determined by EPA Method 9 (reference 40 CFR Appendix A). These limits apply at all times except during startup, shutdown, and malfunction. (9VAC5-80-110 and 9VAC5-50-80)
- Miscellaneous Activities Requirements Limitations Visible Emissions Limit (50-E1, 4730-NB, 4730-SB, 201-E1, PORT-DC, 4701-E1, 1768-E1, 5-E2) Visible emissions from existing (pre-3/17/1972) emissions units which vent to the atmosphere shall not exceed 20 percent (20%) opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 60 percent (60%). (9VAC5-80-110 and 9VAC5-40-80)
- Miscellaneous Activities Requirements Limitations Visible Emissions Limit (50-E1, 4730-NB, 4730-SB, 201-E1, PORT-DC, 4701-E1, 1768-E1, 5-E2) Visible emissions from new (on or after 3/17/1972) emissions units without specific permitted opacity limits which vent to the atmosphere shall not exceed 20 percent (20%) opacity except for one six-minute period in any one hour of not more than 30 percent (30%). This limit applies at all times except during startup, shutdown, and malfunction. (9VAC5-80-110 and 9VAC5-50-80)
- Miscellaneous Activities Requirements Limitations –Emissions Limit (50-E1, 4730-NB, 4730-SB, 201-E1, PORT-DC, 4701-E1, 1768-E1, 5-E2) Emissions from the operation of the following miscellaneous activities equipment (Unit Ref. Nos. 50-E1, 4730-NB, 4730-SB, 201-E1, PORT-DC, 4701-E1, 1768-E1, 5-E2) shall not exceed E=4.10P^{0.67} where P is the process weight rate in tons/hour and E is the PM emission rate in lbs/hour. (9VAC5-80-110 and 9VAC5-40-260)
- 217. **Miscellaneous Activities Requirements Limitations Emission Controls (205-B1 and B2) -**Particulate emissions from the Powder Coating Operation steel shot blast units (Unit Ref. Nos. 205-B1 and B2 shall be controlled by cartridge filters. The cartridge filters shall be provided with adequate access for inspection and shall be in operation when the blast units are operating.

 (9VAC5-80-110, 9VAC5-50-260 and Condition 1 of the 12/17/15 NSR Permit)
- 218. **Miscellaneous Activities Requirements Limitations MACT GGGGG (FAC-REMED) -** Except where this permit is more restrictive than the applicable requirement, Site Remediation Activities at the facility shall be subject to the provisions of 40 CFR 63, Subpart GGGGG National Emission Standards for Hazardous Air Pollutants: Site Remediation. (9VAC5-80-110 and 40 CFR 63, Subpart GGGGG)

Permit Number: TRO-60153 May 23, 2019 Page 83 of 103

Monitoring

- Miscellaneous Activities Requirements Monitoring Visible Emissions Observations (205-B1 and B2) The permittee shall observe the stack/vent of each of the powder coating steel shots blast units (Unit Ref. Nos. 205-B1 and B2) at least once per week (Monday-Sunday) when in operation for visible emissions for at least six minutes. If any visible emissions are noted, corrective action shall be taken to eliminate the visible emissions. Results of observations and any corrective action shall be recorded in the operation log. (9VAC5-80-110)
- Miscellaneous Activities Requirements Monitoring Visible Emissions Observations (All Units Except 205-B1 and B2 and FAC-REMED) The permittee shall observe the stack of each unit in the Miscellaneous Activities operations which vent to the atmosphere, other than the powder coating steel shot blast units (Unit Ref. Nos. 205-B1 and B2), at least once per month when in operation for visible emissions for at least six minutes. If visible emissions are noted, corrective action shall be taken to eliminate the visible emissions. If visible emissions continue after corrective actions, a visible emissions evaluation (VEE) shall be immediately conducted on the stack for at least six minutes in accordance with Method 9 (40 CFR 60, Appendix A). If the VEE opacity average for the stack exceeds ten percent (10%), the VEE shall continue for one hour from initiation to determine compliance with the opacity limits. Results of observations and/or VEEs shall be recorded in the operation log. Records of observations shall include the following:
 - a. The name of the observer.
 - b. Date and time of the observation.
 - c. An indication that the process was operating.
 - d. An indication of the presence or absence of visible emissions.
 - e. Any corrective actions taken to eliminate visible emissions, including the date and time the process was shut down and/or repairs were completed.

If a VEE is conducted, records shall be in accordance with Method 9 (40 CFR 60, Appendix A). (9VAC5-80-110 E)

Miscellaneous Activities Requirements - Monitoring - MACT GGGGG - (FAC-REMED) - The permittee shall monitor the total quantity of the HAPs listed in table 1 of 40 CFR 63 Subpart GGGGG that is contained in the remediation material excavated, extracted, pumped, or otherwise removed during all of the site remediation conducted at the facility to show that it is less than 1 megagram annually and the facility is exempt from the requirements of 40 CFR 63 Subpart GGGGG.

(9VAC5-80-110 and 40 CFR 63.7881(c)(1))

Page 84 of 103

Recordkeeping

- Miscellaneous Activities Requirements Recordkeeping (All Units) The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the DEQ Tidewater Regional Office. These records shall include, but are not limited to:
 - a. Records of visible emissions observations, any corrective action taken, and visible emission evaluations using EPA Method 9 (reference 40 CFR 60, Appendix A), if performed.
 - b. Records of written documentation to support the determination that the total HAP quantity in the remediation materials is less than 1 megagram per year from all remediation activities at your facility as required by 40 CFR 63.7881(c)(2) to qualify for exemption from the requirements of 40 CFR 63 Subpart GGGGG. The documentation must include a description of your methodology and data used for determining the total HAP content of the remediation material.
 - c. These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.

(9VAC5-80-110, Condition 7 of the 9/2/94 NSR Permit, and 40 CFR 63.7881(c))

Testing

223. **Miscellaneous Activities Requirements - Testing - (All Units) -** If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the appropriate method(s) in accordance with procedures approved by the DEQ. (9VAC5-80-110)

Permit Number: TRO-60153 May 23, 2019 Page 85 of 103

XVI.Insignificant Emission Units

224. **Insignificant Emission Units** - The following emission units at the facility are identified in the application as insignificant emission units under 9VAC5-80-720:

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (9VAC5-80-720B)	Rated Capacity (9VAC5-80-720C)
4620-EPT	Electroplating tanks in Bldg 4620	9VAC5-80-720B	Metallic oxides and non-HAP inorganic acids, alkalis, and salts	N/A
509-E1	Natural gas-fired hot water boiler	9VAC5-80-720C	N/A	0.48 MMBtu/hr
274-E2	Binks Dryer (propane)	9VAC5-80-720C	CO, NO _x , PM, SO ₂ , VOC	0.9 MMBtu/hr
274-E3	Binks Dryer (propane)	9VAC5-80-720C	CO, NO _X , PM, SO ₂ , VOC	2.4 MMBtu/hr
274-E4	Space Heater Flat Prep Inspection (propane)	9VAC5-80-720C	CO, NO _X , PM, SO ₂ , VOC	1.875 MMBtu/hr
274-E5	Space Heater Flat Prep Inspection (propane)	9VAC5-80-720C	CO, NO _X , PM, SO ₂ , VOC	0.562 MMBtu/hr
274-E6	Space Heater Flat Prep Inspection (propane)	9VAC5-80-720C	CO, NO _X , PM, SO ₂ , VOC	0.562 MMBtu/hr
274-E7	Space Heater Flat Prep Inspection (propane)	9VAC5-80-720C	CO, NO _X , PM, SO ₂ , VOC	1.88 MMBtu/hr
274-E8	Space Heater Flat Prep Inspection (propane)	9VAC5-80-720C	CO, NO _X , PM, SO ₂ , VOC	0.56 MMBtu/hr
274-E9	Wing Heat - Space Heater Flat Prep Inspection (propane)	9VAC5-80-720C	CO, NO _X , PM, SO ₂ , VOC	0.4 MMBtu/hr
274-E10	Wing Heat - Space Heater Flat Prep Inspection (propane)	9VAC5-80-720C	CO, NO _X , PM, SO ₂ , VOC	0.4 MMBtu/hr
274-E11	Wing Heat - Space Heater Flat Prep Inspection (propane)	9VAC5-80-720C	CO, NO _X , PM, SO ₂ , VOC	0.4 MMBtu/hr
275-E1	Drying Oven - Shape Prep (propane)	9VAC5-80-720C	CO, NO _x , PM, SO ₂ , VOC	3.2 MMBtu/hr
275-E2	Preheat Oven - Shape Prep (propane)	9VAC5-80-720C	CO, NO _X , PM, SO ₂ , VOC	1.88 MMBtu/hr
275-E3	Preheat Oven - Shape Prep (propane)	9VAC5-80-720C	CO, NO _X , PM, SO ₂ , VOC	1.88 MMBtu/hr

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (9VAC5-80-720B)	Rated Capacity (9VAC5-80-720C)
276-E5	Oven (propane)	9VAC5-80-720C	CO, NO _X , PM, SO ₂ , VOC	2.58 MMBtu/hr
205-E1	Small Hot Forming Furnace (propane)	9VAC5-80-720C	CO, NO _X , PM, SO ₂ , VOC	0.4 MMBtu/hr
205-E2	Rod Furnace (propane)	9VAC5-80-720C	CO, NO _X , PM, SO ₂ , VOC	0.8 MMBtu/hr
550-E6	Core Drying Oven (propane)	9VAC5-80-720C	CO, NO _X , PM, SO ₂ , VOC	2.5 MMBtu/hr
550-E15	#3 Furnace, #39386 (propane)	9VAC5-80-720C	CO, NO _X , PM, SO ₂ , VOC	1.3 MMBtu/hr
550-E22	#1 Furnace, #44417 (propane)	9VAC5-80-720C	CO, NO _X , PM, SO ₂ , VOC	5.0 MMBtu/hr
60-E4	Curing Oven - Main Machine Shop (w/ filter) (propane)	9VAC5-80-720C	CO, NO _X , PM, SO ₂ , VOC	0.175 MMBtu/hr
4681-E1	Phosphate Line Bake Oven (natural gas)	9VAC5-80-720C	CO, NO _X , PM, SO ₂ , VOC	4.2 MMBtu/hr
4681-E2	Phosphate Line Dry-Off Oven (natural gas)	9VAC5-80-720C	CO, NO _X , PM, SO ₂ , VOC	4.2 MMBtu/hr
4702-EF2	Paint Booth - Space Heater (propane)	9VAC5-80-720C	CO, NO _X , PM, SO ₂ , VOC	1.089 MMBtu/hr
4619-E1	Sludge dryer - electric	9VAC5-80-720B	N/A	N/A
250-WH1	Propane-fired hot water heater with 120 gallon tank.	9VAC5-80-720C	CO, NO _X , PM, SO ₂ , VOC	0.4 MMBtu/hr
HEATERS- SPACE	Space heaters for comfort heating located throughout the shipyard, stationary and portable	9VAC5-80-720A	N/A	N/A
205-PDR	Nordson Powder Booth - powder coating booth in Bldg 205 (closed loop system with no exhaust to the atmosphere)	9VAC5-80-720B	PM	N/A
PORTENG- CI	All portable Compression Ignition engine (non-road) driven equipment	Not stationary sources	N/A	1-127 hp
PORTENG- SI	All portable Spark Ignition engine (non-road) driven equipment	Not stationary sources	N/A	1-20 hp
29-PT	Pickling Tank, 6,400 gal	9VAC5-80-720B	H ₂ SO ₄	N/A
161-PT	Four Pickling Tanks, each 3,240 gal	9VAC5-80-720B H ₂ SO ₄ N/A		N/A
5664 / 4677-SHT	Special Hull Treatment	9VAC5-80-720B	VOC	N/A

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (9VAC5-80-720B)	Rated Capacity (9VAC5-80-720C)
BLDG- VENTS	General ventilation exhausts from shipyard buildings (fugitive and small tool/machine local ventilation emissions)	9VAC5-80-720B	PM, VOC	N/A
518-E1	Nitrogen/Oxygen Cylinder Purge & Clean Operation	9VAC5-80-720B	TCE, VOC	N/A
550-E10	Abrasive Saw, #5453	9VAC5-80-720B	PM	N/A
5-E1	Metal grinder, 0.1 Lb/Hr	9VAC5-80-720B	PM	N/A
A210	Diesel Tank, 1,000 gallons	9VAC5-80-720B	VOC	N/A
A211	Diesel Tank, 180 gallons	9VAC5-80-720B	VOC	N/A
A213	Diesel Tank on the Floating Dry Dock Vessel, 1,600 gallons	9VAC5-80-720B	VOC	N/A
A214	Diesel Tank on the Floating Dry Dock Vessel, 8,000 gallons	9VAC5-80-720B	VOC	N/A
A215	Diesel Tank on the Floating Dry Dock Vessel, 570 gallons	9VAC5-80-720B	VOC	N/A
A216	Diesel Tank on the Floating Dry Dock Vessel, 800 gallons	9VAC5-80-720B	VOC	N/A
A217	Diesel Tank on the Floating Dry Dock Vessel, 570 gallons	9VAC5-80-720B	VOC	N/A
A218	Diesel Tank, 3,000 gallons	9VAC5-80-720B	VOC	N/A
A219	Diesel Tank, 1,000 gallons	9VAC5-80-720B	VOC	N/A
A220	Diesel Tank, 2,200 gallons	9VAC5-80-720B	VOC	N/A
A221	Diesel Tank, 1,000 gallons	9VAC5-80-720B	VOC	N/A
A222	Diesel Tank, 1,500 gallons	9VAC5-80-720B	VOC	N/A
A223	Diesel Tank, 4,000 gallons	9VAC5-80-720B	VOC	N/A
A224	Diesel Tank, 1,000 gallons	9VAC5-80-720B	VOC	N/A
A225	Diesel Tank, 8,000 gallons	9VAC5-80-720B	VOC	N/A
A226	Diesel Tank, 6,000 gallons	9VAC5-80-720B	VOC	N/A
A227	Diesel Tank, 633 gallons	9VAC5-80-720B	VOC	N/A
A229	Diesel Tank, 300 gallons	9VAC5-80-720B	VOC	N/A
A230	Diesel Tank, 270 gallons	9VAC5-80-720B	VOC	N/A
A231	Diesel Tank, 250 gallons	9VAC5-80-720B	VOC	N/A
A232	Diesel Tank, 700 gallons	9VAC5-80-720B	VOC	N/A
A233	Diesel Tank, 329 gallons	9VAC5-80-720B	VOC	N/A
A234	Diesel Tank, 200 gallons	9VAC5-80-720B	VOC	N/A
	•	•		•

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (9VAC5-80-720B)	Rated Capacity (9VAC5-80-720C)
A301	Recycled Oil Tank, 39,194 gallons	9VAC5-80-720B	VOC	N/A
A302	Recycled Oil Tank, 39,194 gallons	9VAC5-80-720B	VOC	N/A
A401	Wastewater Tank, 66,975 gallons	9VAC5-80-720B	VOC	N/A
A402	Oily Waste Tank, 66,973 gallons	9VAC5-80-720B	VOC	N/A
A403	Waste Tank, 8,300 gallons	9VAC5-80-720B	VOC	N/A
A404	Wastewater Tank, 10,000 gallons	9VAC5-80-720B	VOC	N/A
A405	Wastewater Tank, 25,000 gallons	9VAC5-80-720B	VOC	N/A
A407	Wastewater Tank, 2,000 gallons	9VAC5-80-720B	VOC	N/A
A408	Oily Wastewater Tank, 1,000 gallons	9VAC5-80-720B	VOC	N/A
A409	Oily Wastewater Tank, 1,000 gallons	9VAC5-80-720B	VOC	N/A
A411	Lead Wastewater Tank, 5,000 gallons	9VAC5-80-720B	VOC	N/A
A412	Oily Wastewater Tank, 8,300 gallons	9VAC5-80-720B	VOC	N/A
A413	Oily Wastewater Tank, 8,300 gallons	9VAC5-80-720B	VOC	N/A
A414	Wastewater Tank, 6,000 gallons	9VAC5-80-720B	VOC	N/A
A415	Wastewater Tank, 2,000 gallons	9VAC5-80-720B	VOC	N/A
A416	Wastewater Tank, 10,012 gallons	9VAC5-80-720B	VOC	N/A
A417	Wastewater Tank, 275 gallons	9VAC5-80-720B	VOC	N/A
A418	Wastewater Tank, 275 gallons	9VAC5-80-720B	VOC	N/A
A419	Wastewater Tank, 225 gallons	9VAC5-80-720B	VOC	N/A
A420	Wastewater Tank, 225 gallons	9VAC5-80-720B	VOC	N/A
A421	Wastewater Tank, 1,000 gallons	9VAC5-80-720B	VOC	N/A
A508	Diesel Tank, 530 gallons	9VAC5-80-720B	VOC	N/A
A509	Diesel Tank, 530 gallons	9VAC5-80-720B	VOC	N/A
A510	Diesel Tank, 530 gallons	9VAC5-80-720B	VOC	N/A
A511	Diesel Tank, 270 gallons	9VAC5-80-720B	VOC	N/A
A512	Diesel Tank, 270 gallons	9VAC5-80-720B	VOC	N/A
A513	Diesel Tank, 270 gallons	9VAC5-80-720B	VOC	N/A
A514	Jet-Fuel Tank (JP-5), 2,000 gallons	9VAC5-80-720B	VOC	N/A
A515	Jet-Fuel Tank (JP-5), 2,310 gallons	9VAC5-80-720B	VOC	N/A
A516	Jet-Fuel Tank (JP-5), 2,310 gallons	9VAC5-80-720B	VOC	N/A
A601	Wastewater Tank, 910 gallons	9VAC5-80-720B	VOC	N/A
A602	Oily Wastewater Tank, 910 gallons	9VAC5-80-720B	VOC	N/A

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (9VAC5-80-720B)	Rated Capacity (9VAC5-80-720C)
A603	Wastewater Tank, 910 gallons	9VAC5-80-720B	VOC	N/A
A604	Oily Wastewater Tank, 910 gallons	9VAC5-80-720B	VOC	N/A
A605	Wastewater Tank, 910 gallons	9VAC5-80-720B	VOC	N/A
A606	Wastewater Tank, 910 gallons	9VAC5-80-720B	VOC	N/A
A607	Wastewater Tank, 910 gallons	9VAC5-80-720B	VOC	N/A
A608	Oily Wastewater Tank, 910 gallons	9VAC5-80-720B	VOC	N/A
A609	Wastewater Tank, 910 gallons	9VAC5-80-720B	VOC	N/A
A610	Wastewater Tank, 910 gallons	9VAC5-80-720B	VOC	N/A
A611	Wastewater Tank, 910 gallons	9VAC5-80-720B	VOC	N/A
A612	Wastewater Tank, 910 gallons	9VAC5-80-720B	VOC	N/A
A613	Wastewater Tank, 910 gallons	9VAC5-80-720B	VOC	N/A
A614	Oily Wastewater, 910 gallons	9VAC5-80-720B	VOC	N/A
A615	Wastewater Tank, 910 gallons	9VAC5-80-720B	VOC	N/A
A617	Oily Wastewater Tank	9VAC5-80-720B	VOC	N/A
A701	Waste Oil Tank, 532 gallons	9VAC5-80-720B	VOC	N/A
A702	Used Waste Oil Tank	9VAC5-80-720C	N/A	225 gallons
A703	Used Waste Oil Tank	9VAC5-80-720C	N/A	185 gallons
A704	Used Waste Oil Tank	9VAC5-80-720C	N/A	519 gallons
A801	Motor Oil Tank, 500 gallons	9VAC5-80-720B	VOC	N/A
A802	Motor Oil Tank, 500 gallons	9VAC5-80-720B	VOC	N/A
A803	Motor Oil Tank, 500 gallons	9VAC5-80-720B	VOC	N/A
A804	Hydraulic Oil Tank, 500 gallons	9VAC5-80-720B	VOC	N/A
A805	Hydraulic Oil Tank 500 gallons	9VAC5-80-720B	VOC	N/A
A806	Transmission Fluid Tank, 500 gallons	9VAC5-80-720B	VOC	N/A
A901	No. 6. Fuel Oil Tank, 93,744 gallons	9VAC5-80-720B	VOC	N/A
A902	No. 6 Fuel Oil Tank, 93, 744 gallons	9VAC5-80-720B	VOC	N/A
A903	No. 6 Fuel Oil Tank, 60,303 gallons	9VAC5-80-720B	VOC	N/A
A904	No. 6 Fuel Oil Tank, 60,303 gallons	9VAC5-80-720B	VOC	N/A
A905	No. 6 Fuel Oil Tank, 124,059 gallons	9VAC5-80-720B	VOC	N/A
A906	No. 6 Fuel Oil Tank, 124,059 gallons	9VAC5-80-720B	VOC	N/A
NL706	Diesel Tank on the Nancy Lee vessel, 500 gallons	9VAC5-80-720B	VOC	N/A

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (9VAC5-80-720B)	Rated Capacity (9VAC5-80-720C)
NL707	Oily Waste Tank on the Nancy Lee vessel, 10,000 gallons	9VAC5-80-720B	VOC	N/A
U232	Diesel Tank, 1,000 gallons	9VAC5-80-720B	VOC	N/A
U306	Gasoline Tank, 10,000 gallons	9VAC5-80-720B	VOC	N/A
U503	No. 6 Oil Tank, Powerhouse, 521,304 gallons	9VAC5-80-720B	VOC	N/A
U504	No. 6 Oil Tank, B1744, 171,400 gallons	9VAC5-80-720B	VOC	N/A
U505	No. 6 Oil Tank, B1744, 171,400 gallons	9VAC5-80-720B	VOC	N/A
U508	No. 6 Oil Tank, 10,000 gallons	9VAC5-80-720B	VOC	N/A
U510	Oily Water Tank, 500 gallons	9VAC5-80-720B	VOC	N/A
U511	Oily Water Tank, 48,000 gallons	9VAC5-80-720B	VOC	N/A
U512	Oily Water Tank, 20,000 gallons	9VAC5-80-720B	VOC	N/A
U513	Oily Water Tank, 20,000 gallons	9VAC5-80-720B	VOC	N/A
U514	Oily Water Tank, 30,000 gallons	9VAC5-80-720B	VOC	N/A
U600	Car Wash Tank, 8,000 gallons	9VAC5-80-720B	VOC	8,000 gallons
SG401-424	Aqueous Cleaning Chemicals Tanks, 18,000 gallons each	9VAC5-80-720B	none	N/A
SG425	H ₂ O ₂ Tank, 2,000 gallons	9VAC5-80-720B	none	N/A
SG426	Overflow Tank, 1,200 gallons	9VAC5-80-720B	none	N/A
SG427	NH ₄ OH Tank, 2,400 gallons	9VAC5-80-720B	ammonia	N/A
SG428	Overflow Tank, 250 gallons	9VAC5-80-720B	ammonia	N/A
SG429-431	Aqueous Cleaning Chemicals Tanks, 6,000 gallons each	9VAC5-80-720B	none	N/A
SG432	Aqueous Cleaning Chemicals Tank, 9,000 gallons	9VAC5-80-720B	none	N/A
SG433-434	Aqueous Cleaning Chemicals Tanks, 18,000 gallons each	9VAC5-80-720B	none	N/A
SG435-438	Aqueous Cleaning Chemicals Tanks, 4,000 gallons each	9VAC5-80-720B	none	N/A
SG439-440	Overflow Tanks, 1,250 gallons each	9VAC5-80-720B	none	N/A
SG441	Overflow Tanks, 250 gallons each	9VAC5-80-720B	none	N/A
SG442	Overflow Tanks, 100 gallons each	9VAC5-80-720B	none	N/A
SG443-446	Phosphate Water Tanks, 18,000 gallons each	9VAC5-80-720B	none	N/A
SG447-449	Portable PO ₄ Water Tanks, 18,000 gallons each	9VAC5-80-720B	none	N/A
SG452	DI/DEOX Water/Chilled Water Tank, 22,500 gal	9VAC5-80-720B	none	N/A
SG453-455	DI/DEOX Water Tanks, 18,000 gallons each	9VAC5-80-720B	none	N/A
SG456	Underfloor Collection Tank, 1,000 gallons	9VAC5-80-720B	none	N/A

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (9VAC5-80-720B)	Rated Capacity (9VAC5-80-720C)
SG457	Dead Leg Collection Tank, 250 gallons	9VAC5-80-720B	none	N/A
SG458	Bleed Tank, 18,000 gallons	9VAC5-80-720B	none	N/A
NL700	No. 6 Oil Tank on the Nancy Lee vessel, 124,203 gallons	9VAC5-80-720B	VOC	N/A
NL701	No. 6 Oil Tank on the Nancy Lee vessel, 124,203 gallons	9VAC5-80-720B	VOC	N/A
NL702	No. 6 Oil Tank on the Nancy Lee vessel, 93,884 gallons	9VAC5-80-720B	VOC	N/A
NL703	No. 6 Oil Tank on the Nancy Lee vessel, 93,884 gallons	9VAC5-80-720B	VOC	N/A
NL704	No. 6 Oil Tank on the Nancy Lee vessel, 60,373 gallons	9VAC5-80-720B	VOC	N/A
NL705	No. 6 Oil Tank on the Nancy Lee vessel, 60,373 gallons	9VAC5-80-720B	VOC	N/A
T2B	Treated Water Tank, 60,000 gallons	9VAC5-80-720B	None	N/A
T2A	Treated Water Tank, 60,000 gallons	9VAC5-80-720B	None	N/A
T4138	Treated Water Tank, 60,000 gallons	9VAC5-80-720B	None	N/A
PT-OW	Portable Oily Wastewater Tanks (totes), 900 gallons	9VAC5-80-720B	VOC	N/A
PT-NOW	Portable Non-Oily Wastewater Tanks (totes), various < 900 gallons	9VAC5-80-720B	none	N/A
205-C2	Preheat oven, natural gas-fired, Eclipse AH520	9VAC5-80-720C	CO, NO _X , PM, SO ₂ , VOC	5.5 MMBtu/hr
205-C3	Cure oven, natural gas-fired, Eclipse AH520	9VAC5-80-720C	CO, NO _X , PM, SO ₂ , VOC	5.5 MMBtu/hr
206-C1	Heat cleaning oven, propane-fired, Steelman Model 4.56.54 BA-C	9VAC5-80-720C	CO, NO _X , PM, SO ₂ , VOC	0.6 MMBtu/hr

These emission units are presumed to be in compliance with all requirements of the federal Clean Air Act as may apply. Based on this presumption, no monitoring, recordkeeping, or reporting shall be required for these emission units in accordance with 9VAC5-80-110.

May 23, 2019 Page 92 of 103

XVII. Permit Shield & Inapplicable Requirements

225. **Permit Shield & Inapplicable Requirements -** Compliance with the provisions of this permit shall be deemed compliance with all applicable requirements in effect as of the permit issuance date as identified in this permit. This permit shield covers only those applicable requirements covered by terms and conditions in this permit and the following requirements which have been specifically identified as being not applicable to this permitted facility:

Citation	Title of Citation	Description of Applicability
40 CFR 60 Subpart AA	Standards of Performance for	The Electric Arc Furnaces were installed prior to
	Steel Plants: Electric Arc	the applicability date for this NSPS (installed ca.
	Furnaces Constructed After	1950).
	10/21/1974, and On or Before	
	8/17/1983	
40 CFR 60 Subpart Kb	Standards of Performance for	VOL storage tanks, capacity 20,000 to < 40,000
	Volatile Organic Liquid	gal with maximum true vapor pressure >=15 kPa
	Storage Vessels for Which	(2.16 psi) , and capacity $\geq 40,000 \text{ gal with}$
	Construction, Reconstruction,	maximum true vapor pressure >=3.5 kPa (0.5 psi).
	or Modification commenced	Facility's tanks with the cited capacities have
	after 7/23/1984	maximum true vapor pressure less than the cited
		thresholds.
40 CFR 60 Subpart	Standards of Performance for	The source does not operate any equipment
CCCC	Commercial and Industrial	meeting the definition of "commercial and
	Solid Waste Incineration Units	industrial solid waste incineration (CISWI) unit"
		under this subpart.
40 CFR 60 Subpart	Emission Guidelines and	The source does not operate any equipment
DDDD	Compliance Times for	meeting the definition of "commercial and
	Commercial and Industrial	industrial solid waste incineration (CISWI) unit"
	Solid Waste Incineration Units	under this subpart.
40 CFR 61 Subpart C	National Emission Standards	The foundry and machine shops do not process
	for Beryllium	beryllium products.
40 CFR 61 Subpart H	National Emission Standards	The source is not an applicable source under this
	for Emissions of	subpart. It is not owned or operated by the
	Radionuclides Other Than	Department of Energy.
	Radon From Department of	
	Energy Facilities	
40 CFR 61 Subpart I	National Emission Standards	The source is not an applicable source under this
	for Radionuclide Emissions	subpart. It is not owned or operated by the
	from Federal Facilities Other	Department of Energy.
	Than Nuclear Regulatory	
	Commission Licensees and	
	Not Covered by Subpart H	
40 CFR 63 Subpart N	National Emission Standards	The chromium electroplating process is
	for Chromium Emissions	permanently shutdown. The source is no longer
	From Hard and Decorative	subject to this subpart.
	Chromium Electroplating and	
	Chromium Anodizing Tanks	

Territorianioer. Tito 00133
May 23, 2019
Page 93 of 103

Citation	Title of Citation	Description of Applicability
40 CFR 63 Subpart R	National Emission Standards	The source does not meet the definition of "bulk
	for Gasoline Distribution	gasoline terminal" or "pipeline breakout station"
	Facilities (Bulk Gasoline	under this subpart.
	Terminals and Pipeline	
	Breakout Stations)	
40 CFR 63 Subpart T	National Emission Standards	Solvent cleaning machines containing certain
	for Halogenated Solvent	halogenated solvents which are not used at the
	Cleaning	facility.
40 CFR 63 Subpart X	National Emission Standards	This subpart applies to secondary lead smelters
	for Hazardous Air Pollutants	using lead-bearing scrap metals. The source uses
	from Secondary Lead	pure lead ingots.
	Smelting	
40 CFR 63 Subpart KK	National Emission Standards	The source does not operate any publication
	for the Printing and Publishing	rotogravure, product and packaging rotogravure,
	Industry	or wide-web flexographic printing processes
		which would be subject to this subpart.
40 CFR 63 Subpart	National Emission Standards	The source does not meet the definition of "boat
VVVV	for Hazardous Air Pollutants	manufacturing facility" under this subpart.
	for Boat Manufacturing	
40 CFR 63 Subpart	National Emission Standards	The source does not meet the definition of
WWWW	for Hazardous Air Pollutants:	"reinforced plastic composites production
	Reinforced Plastic Composites	facility" under this subpart.
	Production	
40 CFR 63 Subpart	National Emission Standards	Only with respect to Emission Units FTSF-E1
DDDDD	for Hazardous Air Pollutants	and FTSF-E2 by action of §63.7491(c).
	for Major Sources: Industrial,	
	Commercial, and Institutional	
	Boilers and Process Heaters	
40 CFR 63 Subpart	National Emission Standards	The source is not an area source of HAP, nor does
BBBBBB	for Hazardous Air Pollutants	it meet the definition of "gasoline distribution
	for Source Category: Gasoline	bulk terminal," "bulk plant," or "pipeline facility"
	Distribution Bulk Terminals,	under this subpart.
	Bulk Plants, and Pipeline	
	Facilities	
40 CFR 63 Subpart	National Emission Standards	The source is not an area source of HAP.
CCCCCC	for Hazardous Air Pollutants	
	for Source Category: Gasoline	
	Dispensing Facilities	
9VAC5-40-3410 et seq.	Emission Standards For	Non-petroleum liquid storage tanks, 40,000 gal
(Rule 4-25)	Volatile Organic Compound	capacity or larger, located in a VOC control area
	Storage and Transfer	(9VAC5-20-206). The facility's larger tanks
	Operations	contain petroleum liquids.

Citation	Title of Citation	Description of Applicability
9VAC5-40-4760 et seq.	Emission Standards For	The source received a determination from DEQ
(Rule 4-34)	Miscellaneous Metal Parts	on August 22, 1997 stating that it is not subject to
	and Products Coating	Rule 4-34 for the coating of received metal plates
	Application Systems	used to build new ships. The rule is intended for
		operations that involve the coating of
		miscellaneous parts in the manufacturing or
		assembly of a product. The source does not use
		the received metal plates to manufacture the end
		product at the time of the coating operation; the
		plates are coated at the time of delivery to provide
		pre-assembly protection against the elements for
		an extended period of storage and for later use in
		the construction of new ships.
40 CFR 64 Compliance	Compliance Assurance	Electric Arc Furnaces A, B, and C are subject to
Assurance Monitoring	Monitoring	CAM; however, these units are also subject to
		MACT 40 CFR 63 Subpart EEEEE which is more
		stringent than the CAM requirements; Subpart
		EEEEE satisfies CAM requirements. No other
		emission units at the facility meet the applicability
		thresholds for CAM.

Nothing in this permit shield shall alter the provisions of §303 of the federal Clean Air Act, including the authority of the administrator under that section, the liability of the owner for any violation of applicable requirements prior to or at the time of permit issuance, or the ability to obtain information by (i) the administrator pursuant to §114 of the federal Clean Air Act, (ii) the Board pursuant to §10.1-1314 or §10.1-1315 of the Virginia Air Pollution Control Law or (iii) the Department pursuant to §10.1-1307.3 of the Virginia Air Pollution Control Law.

(9VAC5-80-110 and 9VAC5-80-140)

Page 95 of 103

XVIII. General Conditions

- 226. **General Conditions Federal Enforceability** All terms and conditions in this permit are enforceable by the administrator and citizens under the federal Clean Air Act, except those that have been designated as only state-enforceable.

 (9VAC5-80-110)
- General Conditions Permit Expiration This permit has a fixed term of five years. The expiration date shall be the date five years from the date of issuance. Unless the owner submits a timely and complete application for renewal to the Department consistent with the requirements of 9VAC5-80-80, the right of the facility to operate shall be terminated upon permit expiration.

 (9VAC5-90-80, 9VAC5-80-110, and 9VAC5-80-170)
- 228. **General Conditions Permit Expiration** The owner shall submit an application for renewal at least six months but no earlier than eighteen months prior to the date of permit expiration. (9VAC5-80-80, 9VAC5-80-110, and 9VAC5-80-170)
- General Conditions Permit Expiration If an applicant submits a timely and complete application for an initial permit or renewal under this section, the failure of the source to have a permit or the operation of the source without a permit shall not be a violation of Article 1, Part II of 9VAC5 Chapter 80, until the Board takes final action on the application under 9VAC5-80-150. (9VAC5-80-80, 9VAC5-80-110, and 9VAC5-80-170)
- General Conditions Permit Expiration No source shall operate after the time that it is required to submit a timely and complete application under subsections C and D of 9VAC5-80-80 for a renewal permit, except in compliance with a permit issued under Article 1, Part II of 9VAC5 Chapter 80. (9VAC5-80-80, 9VAC5-80-110, and 9VAC5-80-170)
- General Conditions Permit Expiration If an applicant submits a timely and complete application under section 9VAC5-80-80 for a permit renewal but the Board fails to issue or deny the renewal permit before the end of the term of the previous permit, (i) the previous permit shall not expire until the renewal permit has been issued or denied and (ii) all the terms and conditions of the previous permit, including any permit shield granted pursuant to 9VAC5-80-140, shall remain in effect from the date the application is determined to be complete until the renewal permit is issued or denied.

 (9VAC5-80-80, 9VAC5-80-110, and 9VAC5-80-170)
- General Conditions Permit Expiration The protection under subsections F 1 and F 5 (ii) of section 9VAC5-80-80 F shall cease to apply if, subsequent to the completeness determination made pursuant to section 9VAC5-80-80 D, the applicant fails to submit by the deadline specified in writing by the Board any additional information identified as being needed to process the application. (9VAC5-80-80, 9VAC5-80-110, and 9VAC5-80-170)
- 233. **General Conditions Recordkeeping and Reporting** All records of monitoring information maintained to demonstrate compliance with the terms and conditions of this permit shall contain, where applicable, the following:

- a. The date, place as defined in the permit, and time of sampling or measurements.
- b. The date(s) analyses were performed.
- c. The company or entity that performed the analyses.
- d. The analytical techniques or methods used.
- e. The results of such analyses.
- f. The operating conditions existing at the time of sampling or measurement.

(9VAC5-80-110)

General Conditions - Recordkeeping and Reporting - Records of all monitoring data and support information shall be retained for at least five years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.

(9VAC5-80-110)

- 235. **General Conditions Recordkeeping and Reporting** The permittee shall submit the results of monitoring contained in any applicable requirement to DEQ no later than **March 1** and **September 1** of each calendar year. This report must be signed by a responsible official, consistent with 9VAC5-80-80G, and shall include:
 - a. The time period included in the report. The time periods to be addressed are January 1 to June 30 and July 1 to December 31.
 - b. All deviations from permit requirements. For purpose of this permit, deviations include, but are not limited to:
 - i. Exceedance of emissions limitations or operational restrictions;
 - ii. Excursions from control device operating parameter requirements, as documented by continuous emission monitoring, periodic monitoring, or Compliance Assurance Monitoring (CAM) which indicates an exceedance of emission limitations or operational restrictions; or
 - iii. Failure to meet monitoring, recordkeeping, or reporting requirements contained in this permit.
 - c. If there were no deviations from permit conditions during the time period, the permittee shall include a statement in the report that "no deviations from permit requirements occurred during this semi-annual reporting period."

- General Conditions Annual Compliance Certification Exclusive of any reporting required to assure compliance with the terms and conditions of this permit or as part of a schedule of compliance contained in this permit, the permittee shall submit to EPA and DEQ no later than March 1 each calendar year a certification of compliance with all terms and conditions of this permit including emission limitation standards or work practices for the period ending December 31. The compliance certification shall comply with such additional requirements that may be specified pursuant to §114(a)(3) and §504(b) of the federal Clean Air Act. The permittee shall maintain a copy of the certification for five (5) years after submittal of the certification. This certification shall be signed by a responsible official, consistent with 9VAC5-80-80G, and shall include:
 - a. The time period included in the certification. The time period to be addressed is January 1 to December 31.
 - b. The identification of each term or condition of the permit that is the basis of the certification.
 - c. The compliance status.
 - d. Whether compliance was continuous or intermittent, and if not continuous, documentation of each incident of non-compliance.
 - e. Consistent with subsection 9VAC5-80-110E, the method or methods used for determining the compliance status of the source at the time of certification and over the reporting period.
 - f. Such other facts as the permit may require to determine the compliance status of the source.
 - g. One copy of the annual compliance certification shall be submitted to EPA in electronic format only. The certification document should be sent to the following electronic mailing address:

R3_APD_Permits@epa.gov

(9VAC5-80-110)

237. **General Conditions - Permit Deviation Reporting** - The permittee shall notify the DEQ Tidewater Regional Office (TRO) within four daytime business hours after discovery of any deviations from permit requirements which may cause excess emissions for more than one hour, including those attributable to upset conditions as may be defined in this permit. In addition, within 14 days of the discovery, the permittee shall provide a written statement explaining the problem, any corrective actions or preventative measures taken, and the estimated duration of the permit deviation. Owners subject to the requirements of 9VAC5-40-50C and 9VAC5-50-50C are not required to provide the written statement prescribed in this paragraph for facilities subject to the monitoring requirements of 9VAC5-40-40 and 9VAC5-50-40. The occurrence should also be reported in the next semi-annual compliance monitoring report pursuant to Condition 235 of this permit.

(9VAC5-80-110 and 9VAC5-80-250)

Page 98 of 103

- 238. General Conditions - Failure/Malfunction Reporting - In the event that any affected facility or related air pollution control equipment fails or malfunctions in such a manner that may cause excess emissions for more than one hour, the owner shall, as soon as practicable but no later than four daytime business hours after the malfunction is discovered, notify the DEQ Tidewater Regional Office (TRO) by facsimile transmission, telephone or telegraph of such failure or malfunction and shall within 14 days of discovery provide a written statement giving all pertinent facts, including the estimated duration of the breakdown. Owners subject to the requirements of 9VAC5-40-50 C and 9VAC5-50-50 C are not required to provide the written statement prescribed in this paragraph for facilities subject to the monitoring requirements of 9VAC5-40-40 and 9VAC5-50-40. When the condition causing the failure or malfunction has been corrected and the equipment is again in operation, the owner shall notify the DEQ Tidewater Regional Office (TRO). (9VAC5-20-180)
- 239. General Conditions - Severability - The terms of this permit are severable. If any condition, requirement or portion of the permit is held invalid or inapplicable under any circumstance, such invalidity or inapplicability shall not affect or impair the remaining conditions, requirements, or portions of the permit. (9VAC5-80-110)
- 240. General Conditions - Duty to Comply - The permittee shall comply with all terms and conditions of this permit. Any permit noncompliance constitutes a violation of the Federal Clean Air Act or the Virginia Air Pollution Control Law or both and is ground for enforcement action; for permit termination, revocation and reissuance, or modification; or, for denial of a permit renewal application. (9VAC5-80-110)
- 241. General Conditions - Need to Halt or Reduce Activity not a Defense - It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. (9VAC5-80-110)
- 242. General Conditions - Permit Modification - A physical change in, or change in the method of operation of, this stationary source may be subject to permitting under State Regulations 9VAC5-80-50, 9VAC5-80-1100, 9VAC5-80-1605, or 9VAC5-80-2000 and may require a permit modification and/or revisions except as may be authorized in any approved alternative operating scenarios. (9VAC5-80-190 and 9VAC5-80-260)
- General Conditions Property Rights The permit does not convey any property rights of any sort, or any 243. exclusive privilege. (9VAC5-80-110)
- General Conditions Duty to Submit Information The permittee shall furnish to the Board, within a 244. reasonable time, any information that the Board may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Board copies of records required to be kept by the permit and, for information claimed to be confidential, the permittee shall furnish such records to the Board along with a claim of confidentiality.

(9VAC5-80-110)

Page 99 of 103

- General Conditions Duty to Submit Information Any document (including reports) required in a permit condition to be submitted to the Board shall contain a certification by a responsible official that meets the requirements of 9VAC5-80-80 G. (9VAC5-80-110)
- General Conditions Duty to Pay Permit Fees The owner of any source for which a permit under 9VAC5-80-50 through 9VAC5-80-300 was issued shall pay permit fees consistent with the requirements of 9VAC5-80-310 through 9VAC5-80-350. The actual emissions covered by the permit program fees for the preceding year shall be calculated by the owner and submitted to the Department by April 15 of each year. The calculations and final amount of emissions are subject to verification and final determination by the Department.

(9VAC5-80-110 and 9VAC5-80-340)

- General Conditions Fugitive Dust Emission Standards During the operation of a stationary source or any other building, structure, facility, or installation, no owner or other person shall cause or permit any materials or property to be handled, transported, stored, used, constructed, altered, repaired, or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne. Such reasonable precautions may include, but are not limited to, the following:
 - a. Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads, or the clearing of land.
 - b. Application of asphalt, water, or suitable chemicals on dirt roads, materials stockpiles, and other surfaces which may create airborne dust; the paving of roadways and the maintaining of them in a clean condition.
 - c. Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty material. Adequate containment methods shall be employed during sandblasting or similar operations.
 - d. Open equipment for conveying or transporting material likely to create objectionable air pollution when airborne shall be covered or treated in an equally effective manner at all times when in motion.
 - e. The prompt removal of spilled or tracked dirt or other materials from paved streets and of dried sediments resulting from soil erosion.

(9VAC5-40-90 and 9VAC5-50-90)

General Conditions - Startup, Shutdown, and Malfunction - At all times, including periods of startup, shutdown, soot blowing, and malfunction, owners shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with air pollution control practices for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Board, which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

(9VAC5-50-20 and 9VAC5-40-20)

- 249. **General Conditions Alternative Operating Scenarios** Contemporaneously with making a change between reasonably anticipated operating scenarios identified in this permit, the permittee shall record in a log at the permitted facility a record of the scenario under which it is operating. The permit shield described in 9VAC5-80-140 shall extend to all terms and conditions under each such operating scenario. The terms and conditions of each such alternative scenario shall meet all applicable requirements including the requirements of 9VAC5 Chapter 80, Article 1. (9VAC5-80-110)
- 250. **General Conditions Inspection and Entry Requirements** The permittee shall allow DEQ, upon presentation of credentials and other documents as may be required by law, to perform the following:
 - a. Enter upon the premises where the source is located or emissions-related activity is conducted, or where records must be kept under the terms and conditions of the permit.
 - b. Have access to and copy, at reasonable times, any records that must be kept under the terms and conditions of the permit.
 - c. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit.
 - d. Sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.

(9VAC5-80-110)

- 251. **General Conditions Reopening For Cause** The permit shall be reopened by the Board if additional federal requirements become applicable to a major source with a remaining permit term of three years or more. Such reopening shall be completed no later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 9VAC5-80-80 F. The conditions for reopening a permit are as follows:
 - a. The permit shall be reopened if the Board or the administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.
 - b. The permit shall be reopened if the administrator or the Board determines that the permit must be revised or revoked to assure compliance with the applicable requirements.
 - c. The permit shall not be reopened by the Board if additional applicable state requirements become applicable to a major source prior to the expiration date established under 9VAC5-80-110 D.

(9VAC5-80-110)

- 252. **General Conditions Permit Availability** Within five days after receipt of the issued permit, the permittee shall maintain the permit on the premises for which the permit has been issued and shall make the permit immediately available to DEQ upon request. (9VAC5-80-150)
- 253. **General Conditions Transfer of Permits** No person shall transfer a permit from one location to another, unless authorized under 9VAC5-80-130, or from one piece of equipment to another. (9VAC5-80-160)
- General Conditions Transfer of Permits In the case of a transfer of ownership of a stationary source, the new owner shall comply with any current permit issued to the previous owner. The new owner shall notify the Board of the change in ownership within 30 days of the transfer and shall comply with the requirements of 9VAC5-80-200.

 (9VAC5-80-160)
- General Conditions Transfer of Permits In the case of a name change of a stationary source, the owner shall comply with any current permit issued under the previous source name. The owner shall notify the Board of the change in source name within 30 days of the name change and shall comply with the requirements of 9VAC5-80-200.

 (9VAC5-80-160)
- 256. **General Conditions Permit Revocation or Termination for Cause** A permit may be revoked or terminated prior to its expiration date if the owner knowingly makes material misstatements in the permit application or any amendments thereto or if the permittee violates, fails, neglects or refuses to comply with the terms or conditions of the permit, any applicable requirements, or the applicable provisions of 9VAC5 Chapter 80 Article 1. The Board may suspend, under such conditions and for such period of time as the Board may prescribe any permit for any grounds for revocation or termination or for any other violations of these regulations.

 (9VAC5-80-190 and 9VAC5-80-260)
- 257. **General Conditions Duty to Supplement or Correct Application** Any applicant who fails to submit any relevant facts or who has submitted incorrect information in a permit application shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrections. An applicant shall also provide additional information as necessary to address any requirements that become applicable to the source after the date a complete application was filed but prior to release of a draft permit. (9VAC5-80-80)
- General Conditions Stratospheric Ozone Protection If the permittee handles or emits one or more Class I or II substances subject to a standard promulgated under or established by Title VI (Stratospheric Ozone Protection) of the federal Clean Air Act, the permittee shall comply with all applicable sections of 40 CFR Part 82, Subparts A to F. (40 CFR Part 82, Subparts A-F)

Page 102 of 103

General Conditions - Asbestos Requirements - The permittee shall comply with the requirements of National Emissions Standards for Hazardous Air Pollutants (40 CFR 61) Subpart M, National Emission Standards for Asbestos as it applies to the following: Standards for Demolition and Renovation (40 CFR 61.145), Standards for Insulating Materials (40 CFR 61.148), and Standards for Waste Disposal (40 CFR 61.150).

(9VAC5-60-70 and 9VAC5-80-110)

- General Conditions Accidental Release Prevention If the permittee has more, or will have more than a threshold quantity of a regulated substance in a process, as determined by 40 CFR 68.115, the permittee shall comply with the requirements of 40 CFR Part 68.

 (40 CFR Part 68)
- General Conditions Changes to Permits for Emissions Trading No permit revision shall be required under any federally approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit. (9VAC5-80-110)
- General Conditions Emissions Trading Where the trading of emissions increases and decreases within the permitted facility is to occur within the context of this permit and to the extent that the regulations provide for trading such increases and decreases without a case-by-case approval of each emissions trade:
 - a. All terms and conditions required under 9VAC5-80-110, except subsection N, shall be included to determine compliance.
 - b. The permit shield described in 9VAC5-80-140 shall extend to all terms and conditions that allow such increases and decreases in emissions.
 - c. The owner shall meet all applicable requirements including the requirements of 9VAC5-80-50 through 9VAC5-80-300.

(9VAC5-80-110)

XIX.State-Only Enforceable Requirements

263. **State-Only Enforceable Requirements** - The following terms and conditions are not required under the federal Clean Air Act or under any of its applicable federal requirements, and are not subject to the requirements of 9VAC5-80-290 concerning review of proposed permits by EPA and draft permits by affected states.

9VAC5, Chapter 40, Part II, Article 2: Existing Source Standards for Odor (Rule 4-2)

9VAC5, Chapter 60, Part II, Article 4: Existing Source Standards for Toxic Pollutants (Rule 6-4)

9VAC5, Chapter 50, Part II, Article 2: New and Modified Source Standards for Odor (Rule 5-2)

9VAC5, Chapter 60, Part II, Article 5: New and Modified Source Standards for Toxic Pollutants (Rule 6-5)

(9VAC5-80-110 and 9VAC5-80-300)